DOCUMENT RESUME

ED 233 897 SE 042 806

AUTHOR	Wong, Sylvia Jean
TITLE	The Effectiveness of Communication Forms Used by the Soil Conservation Service and Soil and Water Conservation Districts: A Dual Perspective.
INSTITUTION	Ohio State Univ., Columbus. Graduate School.
PUB DATE	83
NOTE	215p.; Because of small, light type the survey instrument may be marginally legible.
PUB TYPE	Dissertations/Theses - Master Theses (042) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Communication (Thought Transfer); *Conservation Education; Environmental Education; Farmers; *Information Dissemination; *Mass Media; Media Research; *Media Selection; *Organizational Communication; Organizations (Groups); Public Opinion; Questionnaires; Soil Conservation
IDENTIFIERS	Environmental Education Research

ABSTRACT

This study investigated the effectiveness of communication modes used by the Soil Conservation Service (SCS) and Soil and Water Conservation Districts (SWCD) of Clinton, Highland, and Warren countries in southwest Ohio. The evaluation was based on the recorded perceptions of SCS and SWCD personnel and farmers from each of the study countries. Two major conclusions were drawn from the study. First, SCS and SWCD personnel perceive communication modes involving personal contact to be more effective than communication modes which do not involve personal contact. Second, farmers' perceptions of the effectiveness of personal and non-personal forms of communications were variable, and as a result farmers do not always perceive communication forms involving personal contact to be more effective than communication forms which do not involve personal contact. Seven recommendations that should be reviewed and considered by SCS and SWCDs for implementation as part of each district's ongoing communication/information program are presented. These include: having districts continue to emphasize personal contact, district newsletters, radio and local newspapers to communicate conservation information to farmers; having districts attempt to coordinate their special activities with other districts to provide for mutual interests of farmers in neighboring communities; and having districts continue to use mass media. (The SCS/SWCD questionnaire used is included in an appendix.) (Author/JN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED233897

THE EFFECTIVENESS OF COMMUNICATION FORMS USED BY THE SOIL CONSERVATION SERVICE AND SOIL AND WATER CONSERVATION DISTRICTS: A DUAL PERSPECTIVE

A Thesis

Presented in Partial Fulfillment of the
Requirements for the Degree
Master of Science

by

Sylvia Jean Wong, B.S.

The Ohio State University
1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Sylvia Jean Wong
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Approved by

Adviser

School of Natural
Resources

Copyright c 1983
by Sylvia Jean Wong.
All rights reserved.

SE042806

THESIS ABSTRACT

The Ohio State University
Graduate School

NAME: Sylvia Jean Wong QUARTER/YEAR: Summer 1983

DEPARTMENT: School of Natural Resources DEGREE: M.S.

TITLE OF THESIS: The Effectiveness of Communication Forms Used by the Soil Conservation Service and Soil and Water Conservation Districts: A Dual Perspective

The purpose of the study was to determine the effectiveness of communication modes used by the SCS and SWCD of Clinton, Highland and Warren Counties in southwest Ohio. The evaluation was based on the recorded perceptions of SCS and SWCD personnel and farmers from each of the study counties.

The principal conclusions drawn from this study were: 1) SCS and SWCD personnel perceive communication modes involving personal contact to be more effective than communication modes which do not involve personal contact. 2) Farmers' perceptions of the effectiveness of personal and non-personal forms of communication were variable, and as a result farmers do not always perceive communication forms involving personal contact to be more effective than communication forms which do not involve personal contact. 3) Recommendations for consideration by SCS and SWCDs are presented, with additional recommendations for further research.

Adviser's Signature

ACKNOWLEDGMENTS

The writer would like to express her sincere gratitude to the following persons. Without their constant support and faith, this document would still be a series of disjointed thoughts.

Dr. John Disinger. For his faith in the writer and this project, for having the patience of a saint, and for being a constant source of encouragement. But most of all, for threatening to shuffle me to another adviser who might not have been as patient and understanding.

Dr. Robert Vertrees and Dr. Clinton Shepard. For reading endless copy and for putting up with my unreliable delivery schedule, and for providing alternative points of view regarding this study.

To all three instructors for being the kind of instructors to whom I would never give anything but my best efforts.

Daniel Kush and Bill Schneider. Thanks for spending the last two years helping me to verbalize and conceptualize this project, for your assistance with background information, and for always saying "Go for it!" Special thanks to Dan. I owe you a quarter for the phone call, and a world of thanks for your enthusiasm for this project.

To all the Soil Conservation Service personnel (from Washington, D.C., all the way down to the counties) and the Agricultural Stabilization and Conservation Service personnel, for helping to get this study started, and the Soil and Water Conservation District personnel and farmers of Clinton, Highland and Warren Counties for taking part in this study.

To my family and friends who have believed in my abilities and in my need to finish the study. Special thanks go to my mother, Gail, for believing in me and everything I have done in these past four years; to my sister, Shari, for always being there with an extra set of hands and an extra typewriter; to my brother, Michael, for all the movies when I needed a diversion, and for the loving and encouraging words, "please finish"; and to my father, Davis, for letting me know at the very end that he was excited about this achievement.

Lastly, to Rufus. For always being there in my worst moments and for listening without feeling the need to respond.

TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS ii

TABLE OF CONTENTS iv

LIST OF TABLES vii

LIST OF FIGURES x

CHAPTER I. AN INTRODUCTION TO THE COMMUNICATION OF CONSERVATION INFORMATION TO FARMERS 1

A. Communication of Conservation Information Throughout History 1

B. Literature Review 5

C. Problem Statement 16

D. Need for Study 19

CHAPTER II. METHODS USED TO DETERMINE THE EFFECTIVENESS OF COMMUNICATION MEDIA USED BY THE SOIL CONSERVATION SERVICE AND SOIL AND WATER CONSERVATION DISTRICTS 22

A. Introduction 22

B. Study Goals and Objectives 24

C. Basic Assumptions and Hypotheses . . . 26

D. Limitations of the Study 28

E. Selection of Sample Population 30

F. Survey Response 38

G. Survey Design 39

H. Organization and Presentation of Results 53

Page

CHAPTER III. THE EFFECTIVENESS OF COMMUNICATION MODES AS EVALUATED BY FARMERS AND SCS AND SWCD PERSONNEL OF CLINTON, HIGHLAND AND WARREN COUNTIES 54

Part I. Survey Results from Farmers . . 54

Section I. Respondents' Backgrounds . . 54

Farmer Status 56

Size of Farm 59

Section II. General Communication/ Information Media 61

Forms of Communication Through Which Conservation Information is Received 62

Effectiveness of Communication Forms of Providing Conservation Information 68

Trust Placed in Conservation Information Received From Communication Forms 78

SCS and SWCD Annual and Special Activities as Sources of Conservation Information 90

Section III. Conservation through Mass Media 101

Radio 102

Television 106

Newspapers 109

Magazines 113

Section IV. Contact with SCS/SWCD Personnel 116

Section V. Conservation Topics for Future Programs 119

Page

Part II. Survey Results from SCS and SWCD Personnel 120

Survey Response 120

Section I. General Communication Program 121

Section II. Conservation Information through Television 139

Section III. Conservation Information through Radio 141

Section IV. Conservation Information through Television 153

Section V. Conservation Information through Magazines 163

CHAPTER IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS. 167

A. Purpose 167

B. Study Goals and Objectives 167

C. Methodology 168

D. Summary of Survey Results 169

E. Conclusions Based on Hypotheses . . 175

F. Recommendations 177

BIBLIOGRAPHY 180

APPENDIX A. SCS/SWCD Survey 182

APPENDIX B. Farmer Survey 193

LIST OF TABLES

TABLE Page

1. Percentage of Surveys Returned By Farmers of Clinton, Highland and Warren Counties 56

2. Farmer Status of Clinton, Highland and Warren County Respondents 57

3. Summary of Farmer Status for Clinton, Highland and Warren Counties 59

4. Size of Respondents' Farms 60

5. Forms of Communication Identified by Farmers of Clinton, Highland and Warren Counties as Sources of Conservation Information 64

6. Summary of Communication Forms Identified by Farmers of Clinton, Highland and Warren Counties as Sources of Conservation Information. 67

7. Forms of Communication Ranked by Farmers of Clinton, Highland and Warren Counties According to How Well Each Farm Provides Conservation Information 70

8. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties Based on How Well Each Form Provides Conservation Information 72

9. Effectiveness of Communication Modes of Providing Conservation Information as Rated by Clinton County Farmers 74

10. Effectiveness of Communication Modes of Providing Conservation Information as Rated by Highland County Farmers 76

11. Effectiveness of Communication Modes of Providing Conservation Information as Rated by Warren County Farmers 77

TABLE Page

12. Summary of the Effectiveness of Communication Modes of Providing Conservation Information as Rated by Farmers of Clinton, Highland and Warren Counties 79

13. Forms of Communication Ranked by Farmers of Clinton, Highland and Warren Counties According to the Amount of Trust Placed in Conservation Information Received 81

14. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties According to Trust Placed in Conservation Information Received 83

15. Communication Forms Ranked by Clinton County Farmers According to the Amount of Trust Placed in Conservation Information Received . . 85

16. Communication Forms Ranked by Highland County Farmers According to the Amount of Trust Placed in Conservation Information Received . . 87

17. Communication Forms Ranked by Warren County Farmers According to the Amount of Trust Placed in Conservation Information Received . . 88

18. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties According to the Amount of Trust Placed in Conservation Information Received . . 89

19. Summary of Agency Response 120

20. Summary of Communication Forms Used by the SCS and SWCD 123

21. Summary of Effectiveness of Communication Forms Rated by SCS and SWCD Personnel of Clinton, Highland and Warren Counties 127

22. Effectiveness of Communication Forms as Ranked by SCS and SWCD Personnel of Clinton, Highland and Warren Counties Based on Personal Preference 130

TABLE Page

23. Effectiveness of Communication Forms as Ranked by SCS and SWCD Personnel of Clinton, Highland and Warren Counties Based on Professional Judgement 133

24. Number of Bulletins/Flyers Used by Clinton, Highland and Warren Counties Per Year 134

25. Number of Field Demonstrations Held in Clinton, Highland and Warren Counties Per Year 135

26. Number of Tours Held by Clinton, Highland and Warren Counties Per Year 136

27. Number of Clinics Held by Clinton, Highland and Warren Counties Per Year 137

28. Number of Public Meetings Held by Clinton, Highland and Warren Counties Per Year 138

LIST OF FIGURES

FIGURE Page

1. Location of Clinton, Highland and Warren Counties in Ohio 32

CHAPTER 1

AN INTRODUCTION TO THE COMMUNICATION OF CONSERVATION INFORMATION TO FARMERS

The purpose of this study was to evaluate the effectiveness of communication media used by the Soil Conservation Service (SCS) of the U.S. Department of Agriculture, and of Soil and Water Conservation Districts (SWCD) in the dissemination of conservation information to farmers. In doing this, data was collected from both the "sender," (the agencies) and the "receivers" (the farmers) in order to compare the effectiveness of communication media as it is perceived by each group. Based on these comparisons, recommendations were made to the SCS and SWCDs regarding the strengths and weaknesses of their existing communication formats. Recommendations were also made about changing communication efforts in the future in order to facilitate the dissemination of conservation information.

A. Communication of Conservation Information Throughout History

The scope of this study includes both the Soil Conservation Service (SCS) and the Soil and Water Conservation

District (SWCD), because of the interrelationship of their goals and responsibilities. Although created at different times, under separate legislation, in the nation's conservation history, these two agencies work together toward the same goal--the conservation of soil and water, surveying of natural resources and the protection and development of rural communities (USDA, 1980).

The SCS was created under the Soil Conservation Act of 1935 (P.L. 46), and succeeded the Soil Erosion Service. The SCS provides technical assistance to farmers by making available information on soil capabilities and conditions, water resources, and plant resources. In addition, it lends assistance to farmers planning for the maintenance and improvement of their soil and water resources.

The SCS and its work were quickly brought before the public eye during the Dust Bowl years. At that time, wind eroded fertile soils from the Great Plains, causing dust storms and clouds of dust which "...could be seen as far away as the major cities of the Atlantic seaboard..." (Held and Clawson, 1965). The dramatic events of those years proved to be sufficient impetus to arouse public concern over the nation's soil and water problems.

Within rural America, the impact of the SCS could be seen among the nation's farms. The success of SCS efforts was passed, by word of mouth, from farmer to farmer, among ranchers and neighbors. Local agricultural journalists picked up the stories and reported them to newspapers and farm journals. To assure that the importance of soil and water conservation was kept before farmers and the general public, the SCS began an aggressive public information program (Simms, 1970).

Hugh Hammond Bennett was probably the staunchest supporter of the soil conservation movement. Having begun work in the United States Department of Agriculture (USDA) Bureau of Soils in 1903, Bennett was a veteran of the conservation movement when he was brought over from USDA to head the Department of the Interior's Soil Erosion Service in 1933 (Simms, 1970). Bennett remained in charge of the Soil Erosion Service when it was transferred from the Department of the Interior to USDA in March, 1935. Shortly thereafter, when P.L. 46 was passed into law, the Soil Erosion Service became the Soil Conservation Service with Bennett in charge of the new agency (Simms, 1970).

In addition to "science, farmer participation...and congressional relations" (Simms, 1970), Bennett also believed that the relationship between the agency and the press was both positive and useful, employed journalists and capable writers to handle the agency's press and public relations. Furthermore, he acknowledged press and radio as a significant part of the work done by the SCS (Simms, 1970).

Since its inception, the SCS has conducted some form of public information work. In addition to authorizing the creation of the SCS, Public Law 46 (1935) includes a provision for conducting investigations and for the dissemination of the resulting information (Simms, 1970, U.S. Statute @ Large, 1935). Under this law, SCS is authorized to:

> ...conduct surveys, investigations, and research relating to the character of soil erosion and the preventive measures needed, to publish the results of any surveys, investigations, or research, to disseminate information concerning such methods, and to conduct demonstrational projects in areas subject to erosion by wind and water.

The SCS uses a variety of education and communications media by which it reaches the public. In addition to newspapers, periodicals, and radio, SCS has also brought soil conservation to the public through newsletters, on-farm demonstrations, workshops, and personal contact.

The Soil and Water Conservation District (SWCD) came into existence under the Standard State Soil Conservation Law, which was published and released by the U.S. Department of Agriculture on May 13, 1936 (Simms, 1970). These districts were created to assist the SCS in carrying out the conservation programs which were the primary responsibility of the SCS.

By law, SWCDs are legal subdivisions of the state government. Districts generally follow county lines and are organized under state law by farmer vote. They are administered by elected officials, and can act without interference from any other agency. The SWCD district supervisor makes policy decisions for the districts, while the SCS provides technical assistance and the USDA Agricultural Stabilization and Conservation Service (ASCS) provides funding help.

The conservation district, which functions as the liaison between farmers and agricultural agencies (Archer, 1969) coordinates district activities with the primary goal of conserving and improving soil, water, and plant resources on farms throughout the district. The district's program requires the dissemination of conservation information to farmers and the general public. Various agricultural agencies, schools, clubs, and manufacturers assist the SWCD in passing on this information. Through the coordinated efforts of these entities, conservation measures are promoted and implemented.

B. Literature Review

Literature on the subject of conservation information dissemination can be categorized under three major headings: periodical literature, thesis studies, and agency documentation. Each of these categories seems to be characteristic of a particular period in conservation history.

Periodical literature in this area was limited prior to the 1950's, but became more frequent during the mid- to late-1950's. Thesis studies characterized the 1960's and the early to mid-1970's. Most recently, agencies with missions in agriculture, conservation, and environment have been the proponents of investigations into the area of education/communication/information effectiveness. These "mini-studies" began to appear during the late 1970's and continue to appear sporadically, adding to the continually growing number of magazine articles and theses which document the status of education/communication/information services which provide conservation information.

Carlson (1956) and Partain (1957) were not intent on passing judgment on the forms of communication used to convey conservation information when their articles appeared in the Journal of Soil and Water Conservation. Rather, they were concerned with bringing to light two forms of media which they believed could further public awareness of conservation. Carlson expounded the virtues of radio. Partain, like Hugh Hammond Bennett, believed in the power of the press. Through their articles, Carlson and Partain encouraged conservationists to bring conservation to the public through radio and newspapers which, at the time, had the greatest ability to reach wide and diversified audiences.

Studies which actually evaluated communication/education media used to convey conservation and/or agricultural information originated in the field of agricultural education. The majority of such studies have been based on surveys of teachers of vocational agriculture and/or farmers who attended adult farmer education classes conducted by teachers of vocational agriculture. A study by Christiansen (1965) indicated that the individuals and institutions responsible for the dissemination of information have become increasingly more adventurous and innovative in their choice and use of communication media. In addition, the study by Christiansen (1965), and studies by Welsh (1962) and Crabbe (1963) point out problems and deficiencies within communication/education programs. According to these studies some of these problems were due to the lack of receptiveness of farmers to certain forms of communication. The study by Crabbe (1963) indicated that problems might be the result of inadequate skills and/or training of educators and communicators.

An unpublished thesis by Welsh (1962) studied the value of practices used by Ohio vocational agriculture teachers in their adult farmer classes and recommended practices to improve adult farmer programs. Through his survey, Welsh determined that farmers valued a personal invitation, either from the teacher or from class members, to enroll in vocational classes over mass media announcements regarding vocational classes.

Welsh indicated that the use of mass media, specifically radio and newspapers, to inform farmers about classes received low ratings from most farmers when compared to personal visits from the teacher or an adult class member and to a post card or letter from the teacher. However, even though Welsh's study indicated that radio and newspapers received low ratings from farmers, he pointed out that farmers placed a higher than average value on newspaper announcements (compared to letters and visits).

Finally, Welsh determined that tours and field trips were popular teaching methods for adult farmers, and that on-the-farm visits by teachers were highly desired by farmers. However, it is interesting to note that while these methods were both popular and desired, only 5.7% of the respondents indicated that field trips and tours were the most valuable type of meeting in providing assistance with farm operations. The largest percentage of respondents (30.3%) indicated that an outside speaker or specialist was of most value in providing assistance with farm operations (Welsh, 1962).

Crabbe's study, Use of Mass Media in Public Relations by Ohio Teachers of Vocational Agriculture (1963) investigated how vocational agriculture teachers used mass media (particularly television, radio, and newspapers) to publicize their educational programs. In addition, Crabbe identified the skills and understandings vocational agriculture teachers indicated they needed to make more effective use of mass media.

Although Crabbe's study noted that teachers made use of television, radio and newspapers in their efforts to publicize vocational agriculture programs, the study also noted that printed media were used more extensively than broadcast media. Furthermore, Crabbe recommended that teachers need to and desired to develop better skills in the use of all mass media, and that teachers should be given assistance in establishing relationships with mass media personnel.

Hinson's study, An Analysis of Soil Conservation Information as Used in Wayne County, Ohio (1967) stands out from the studies by Welsh (1962) and Crabbe (1963), as well as from other agricultural education and/or communication studies for two reasons. First, Hinson's study evaluates modes of information dissemination used for the express purpose of conveying conservation information. Second, the study focuses on the education/communication efforts of a government agency, rather than of a vocational agriculture program.

Hinson's study investigated the effectiveness of various forms of communication used to inform district cooperators of conservation information. The evaluation was based on the stated preferences of the cooperators for information sources and the amount of conservation they had applied to their land.

The survey results from Hinson's study indicated that farmers preferred personal, rather than impersonal, sources of conservation information. Forty percent of the surveyed farmers indicated that Soil Conservation Service (SCS) personnel were the most frequent "personal" source of conservation information. This source was followed in importance by neighbors, county agents, vocational agriculture teachers, and grain elevator dealers.

In Hinson's study, the category of "impersonal" sources of conservation information was headed by farm magazines, which were chosen as the first "impersonal" source of conservation information by 62% of the respondents. Magazines were followed by newspapers, newsletters, bulletins, and radio in order of importance.

In terms of the most convincing method of conservation information, Hinson found that field days and tours were more convincing then other forms of communication.

In his final assessment of conservation information media, Hinson advocated the continued use of a multifaceted approach to the dissemination of conservation information, the acknowledgment of the importance of tours and field days as a valid form of disseminating conservation information, the further investigation of television and radio as forms of information dissemination, and the continued close contact of SCS personnel with district cooperators as an effective means of furthering conservation.

As these studies indicate, the form of conservation information most valued by farmers is personal contact. Despite the fact that society is becoming more automated and technology oriented, mass media, exclusive of newspapers, have been found to lag behind personal contact as a readily accepted source of conservation information. Why this pattern has developed is not apparent from study results of Christiansen, Welsh, Crabbe and Hinson. However, if Crabbe's study (1963) in mass media usage was representative of persons responsible for education of agricultural communities during the 1960's, then the problem may not lie in the receptiveness, or lack of receptiveness in the farming communities surveyed, but in the lack of experience and skill of educators and communicators in using mass media most effectively in their efforts to communicate conservation information.

The agency documents produced during the 1970's seemed to be characterized by a narrower focus of objectives in conservation and by surveys which were directed toward and limited to farmers and farming communities. The various agriculture and environment related agencies cited herein have emphasized in their documents tillage practices which would reduce or eliminate the erosion of highly productive soils, rather than produce documents which are concerned with the broad category of conservation. Furthermore, although the agencies mentioned hereafter are responsible to both the urban and the rural communities in their respective areas, the surveys conducted by each agency were not directed toward both communities, but were limited to the farmers and farming community served by each agency.

In 1973, the Soil Conservation Society of America published the proceedings of a national conference in a document entitled, "Information and Education: Conservation Tillage." In this document, Owens and Patterson presented a summary of their study on educational programs, activities, and the acceptance of conservation tillage systems. Their questionnaire surveyed extension agronomy and agricultural engineering specialists from 33 states.

The study revealed that almost 85% of the surveyed states conducted educational programs, and that multidisciplinary approaches were being used. Chemical and implement firms, county agents, research personnel, and persons in the field of agronomy, engineering, soils, weed sciences and economics were listed among those entities involved in tillage education.

Furthermore, the summary from Owens and Patterson's study indicated that 96% of the surveyed states listed demonstrations and 84% of the surveyed states listed meetings as popular educational and informational methods. Tours seemed to be the least popular educational and informational media, having been listed by only 36% of the responding states.

Kroetz's 1979 study on farmer attitudes and use of crop management practices affecting water quality revealed a difference in the accepted sources of conservation information. In this study, magazines were listed by 51.7% of the survey respondents as the leading source of agricultural information. Thirty percent of the survey respondents listed magazines as the leading source of pollution control practices. In contrast, personal contacts were considered a reliable source of information on agricultural practices by 28.3% of the respondents and a reliable source of information on pollution control practices by 11.7% of the respondents.

While these results are substantially different from those reported in previously cited studies, they are not overwhelmingly in favor of mass media as reliable sources of conservation information. Kroetz's study indicated that the other three forms of mass media--radio, television, and newspapers--were significantly lower than individual contacts in the percentage of respondents who thought these forms of communication were reliable sources of information in either agricultural practices or pollution control practices.

As part of his study, Kroetz cited the Great Lakes Basin Commission's Survey of U.S. Great Lakes Basin Farmers Regarding Water Pollution from Agricultural Activities (1977). In this study, farmers were asked to identify their source of water pollution information. Eighty percent of the respondents listed newspapers and magazines as the source of this information. These sources were followed by television (37%) and radio (36%). Farm organization meetings were listed by only 24% of the respondents as a source of water pollution information.

While the results of the Kroetz and Great Lakes Basin Commission studies do not conclusively indicate that mass media have replaced personal contact as the most popular, accepted, or reliable source of conservation information, they do indicate that mass media do have a role in the dissemination of environmental information. Furthermore, the Kroetz and Great Lakes Basin Commission studies indicate that mass media can be used successfully to reach agricultural communities with conservation-related information.

A survey of the farmers of the Upper Honey Creek Watershed (Ohio) in 1980 supported the more traditional trends which favor personal contact over other forms of communication as a reliable source of conservation information. Respondents to the survey designed by Schmidt and Schindler gave highest priority to the Honey Creek (SCS) staff and to neighbors as the most helpful sources of information for reduced tillage practices. However, the results of this study also indicated a departure from past trends of educational and informational methods as meetings, tours, and workshops received low priority ranking from respondents. These forms of communication were considered to be the least helpful sources of information.

In contrast to these results are the results of a study by Ladewig and Jones (1981). In their study to determine the extent to which Ohio farmers used various tillage systems, the responses of 808 farmers from 30 Ohio counties were reported. Survey responses indicated that meetings, demonstrations, and tours still prevailed among Ohio farmers as the most important sources of information for conservation and tillage systems. Furthermore, television and radio broadcasts received low ratings in terms of importance as sources of information. These results lend further credence to past patterns which advocate personal contacts over mass media as accepted, popular, or reliable sources of conservation information.

From the results of these studies, it is difficult to assess which forms of communication are most effective in the dissemination of conservation information to farmers. The appropriateness and effectiveness of the chosen media seem to be affected by the topic of discussion.

Topics related to farm operations, such as tillage practices, seem to lend themselves toward the traditional modes of demonstration, tours, and workshops. This may be due to the fact that some farm operations are easily adapted to a show-and-tell style of presentation.

In contrast, conservation topics, especially those which are environmentally focused, such as water pollution and pollution control practices, lend themselves well to mass media for their presentations. This may be attributable to the emotional appeal of various environmental topics. This quality makes them almost ideal candidates for presentation through the hands of a writer who can effectively use his craft to either gather support or to create opposition for an environmental issue.

Where the problems and deficiencies of each form of communication exist is still unclear. Whether problems and deficiencies are intrinsic to the mode, itself, or are the result of human-related factors has not been determined. However, the inconsistent popularity of demonstrations, tours, and workshops as well as the inconsistent popularity of human sources has not been attributed to any specific cause by any of the studies cited.

C. Problem Statement

Studies by Welsh (1962), Crabbe (1963), Hinson (1967), Owens and Patterson (1973), Kroetz (1979), Schmidt and Schindler (1980), and Ladewig and Jones (1981) are only a few among the many studies reported in the past two decades concerned with the effectiveness of communication media used to inform farmers about agriculture and topics related to natural resources management. The majority of studies available for review have originated in the field of agricultural education. The studies by Welsh (1962), Crabbe (1963) and Hinson (1967) are examples of these. However, in more recent years, agencies with responsibilities in agriculture, conservation, and natural resources management have been initiators and primary researchers of studies in communication effectiveness. The studies by Owens and Patterson (1973), Kroetz (1979), Schmidt and Schindler (1980), and Ladewig and Jones (1980) are examples.

Although these studies may differ in their primary goals and/or objectives, they have a common use as sources of information regarding the effectiveness of various communication methods. From these studies it is possible to learn about the effectiveness of various communication forms as they apply to different education and communication situations. In addition, these studies have made suggestions on areas needing improvement and on areas needing further study.

However, despite the number and quality of these studies, there are still differences of opinion or perception as to which mode or modes of communication is or are most effective when working with farmers. According to Hinson (1967), educators are not sure which types of information media are most effective. Educators and communicators are likely to disseminate agricultural and/or natural resources-based information less efficiently if this ambiguity continues to exist. Clearly establishing the effectiveness of information media could help educators and communicators reduce the use of "trial and error" methods when selecting communication media and implementing communication activities.

By determining what modes of communication are most effective at providing agriculture and/or natural resources information to farmers and farming communities, educators and communicators can more effectively channel their efforts in information dissemination toward the media and procedures best suited to the audience. In doing so, they can take steps toward more effective education and communication as they achieve a better and more thorough understanding of the educational needs of the community and the procedures best suited to meet those needs.

Therefore, this study will investigate the effectiveness of the communication methods used by the U.S. Department of Agriculture Soil Conservation Service (SCS) and Soil and Water Conservation District (SWCD) to convey conservation information to farmers in order to determine which method or methods of communicating conservation information is best suited to the educational needs of the farming community.

D. Need for Study

The most significant criterion supporting the need for this study is a lack of studies done by environmental communicators on the subject of communication effectiveness. Although the writer's investigation into the existing literature revealed numerous studies which evaluated communication media, none of these studies originated from the field of natural resources management, let alone from the specific area of environmental communication. Only one study, by Hinson (1967), which is discussed in Chapter I, was somewhat related to natural resources. His research is the foundation on which this study is built.

Environmental communications is a relatively new area in the field of natural resources management. As such, it is not surprising to the writer that studies focusing on the effectiveness of communication efforts are few. However, its sister areas, environmental interpretation and environmental education, have been in existence for a longer time. Considering the number of years these two fields have been in existence, there are surprisingly few studies on the evaluation of information/communication formats used by professionals in these fields.

While the existing literature in the areas of environmental education and interpretation contains numerous "how-to" works and constantly reminds educators and interpreters to seek feedback on their performance, studies which have actually evaluated performance, based on comparisons of sender and receiver perspectives, are almost non-existent.

What does exist in the literature reveals that the evaluation of information/education media has been the subject of numerous studies in the fields of agricultural education and agricultural communications. The quantity of published and unpublished material in this area indicates that professionals in agricultural education and communications recognize the importance of choosing appropriate vehicles for the transmission of information, understanding that certain forms of communications are more effective than others at reaching specific audiences.

In the field of agriculture, studies in communication effectiveness are closely related to agricultural education, or to farmer attitude studies. In both areas, the studies generally evaluate communication media from the perspective of either the sender or the receiver. Few, if any, evaluate the effectiveness of communication media comparatively, from both perspectives.

The majority of agricultural education studies have been done in connection with vocational agriculture schools. Although this might be expected in the field of agricultural education, it indicates to this writer a narrow view of institutions which participate in the education of farm communities. It is impossible and beside the point to deny the fact that vocational agriculture schools play a major role in the education of farm communities throughout the country. However, other institutions such as clubs, industries and government agencies also function in the role of educators of farmers and the broader rural community. As such, a study which evaluates the education/communication efforts of one of these "other" institutions may add new information to the areas of communication and education in agriculture, as well as in natural resources management.

In a similar position are farmer attitude surveys. Although they contain information on the effectiveness of and/or the preferred types of communication media, they are first and foremost surveys which are intended to determine the attitudes of farmers in response to a particular farm practice. In addition, the information derived on communication effectiveness is only a secondary benefit gleaned from a brief series of questions intended to evaluate the education efforts of a particular agricultural program. Thus, the need for a study with a primary objective of evaluating the effectiveness of communication media is further supported considering the inclusion of an education survey appears to be an afterthought to those who have conducted these studies; that these surveys play only a minor role in these studies; and that it is only by chance that these surveys provide information on the effectiveness of communication media.

CHAPTER II

METHODS USED TO DETERMINE THE EFFECTIVENESS OF COMMUNICATION MEDIA USED BY THE SOIL CONSERVATION SERVICE AND SOIL AND WATER CONSERVATION DISTRICTS

A. Introduction

The review of the existing literature prior to initiating this study consisted of a search for communication studies done in the area of natural resources management, and for studies which would support further investigation into communication/information systems used in natural resources management. Studies of particular importance were those which investigated government agencies involved in natural resources management, particularly those which focused on the Soil Conservation Service (SCS) and the Soil and Water Conservation District (SWCD).

This investigation revealed that existing literature was dominated by studies originating in the field of agricultural education. Furthermore, the majority of these studies focused on the dominant educational entity in agricultural communities, the vocational agricultural class. The researcher found only one study which focused on the SCS. However, it was also generated in the area of agricultural education. In addition, the search revealed only one study regarding communication/information efforts which originated in the field of natural resources management.

Also of particular interest were studies which had focused on both the "sender" and "receiver" of communication, because the goal of this study was to evaluate SCS and SWCD communication efforts from a dual perspective. The researcher intended to compare the perceptions of SCS and SWCD personnel regarding their communication efforts, with farmers' perceptions of these same communication efforts, as a way of evaluating those communication efforts. However, the majority of the studies reviewed by the researcher focused on either the "sender" or the "receiver".

The existence of these "holes" in the literature provided impetus for the researcher to design a study which would investigate communication efforts in the field of natural resources management. Because the existing literature reviewed by the researcher contained only a few studies which focused on the SCS, the writer was further compelled to maintain the original study objectives: 1) to evaluate the effectiveness of a communication system from a dual perspective, and 2) to focus on a government agency involved in natural resources management.

B. Study Goals and Objectives

Prior to initiating this study, the researcher established a series of goals and objectives which could be achieved through this study. It was determined that achievement of two goals would be the end result of the study. A series of seven objectives were the steps taken to arrive at those goals, as well as the foundation on which the questionnaires were based. The objectives were grouped into those which applied to the SCS/SWCD offices, those which applied to farmers, and those which applied to both groups. The two goals and seven objectives established for the study are as follows:

1. Goals

a. To evaluate the effectiveness of communication media used by the SCS and SWCD in their efforts to disseminate conservation information to farmers.

b. To recommend to the SCS and SWCD changes and/or improvements to current SCS/SWCD information programs which might facilitate the process of informing farmers about conservation.

2. Objectives

For SCS/SWCD

a. To determine what forms of communication are used by SCS/SWCD personnel to inform farmers about conservation.

b. To determine the effectiveness of those forms of communication as they are perceived by agency personnel.

c. To investigate the current trends in using mass media (specifically radio, television, newspapers and magazines) and to investigate the potential of these communication forms for use in the future.

For Farmers

a. To determine what forms of communication about conservation are being received by farmers.

b. To determine the effectiveness of those forms of communication as they are perceived by farmers.

c. To determine conservation topics of interest (both current and potential) as specified by farmers.

For SCS/SWCD and Farmers

To compare responses from agency personnel with responses from farmers, thereby evaluating communication efforts from a "dual perspective."

C. Basic Assumptions and Hypotheses

Before initiating this study, the researcher made the following assumptions about SCS and SWCD personnel, and farmers as part of the necessary foundation for the study.

1. SCS/SWCD Personnel

a. SCS and SWCD personnel have varying opinions regarding the effectiveness of communication forms used to convey conservation information.

b. SCS and SWCD personnel receive "feedback" from farmers regarding their conservation information efforts.

c. SCS and SWCD personnel assimilate feedback provided by farmers and attempt to modify their information programs accordingly.

2. Farmers

a. Farmers have varying opinions regarding the effectiveness of the communication forms through which they receive conservation information.

b. Farmers place varying degrees of trust on conservation information based on the source of that information.

3. SCS/SWCD Personnel and Farmers

   The continuous feedback and modification cycle shared by SCS and SWCD personnel, and farmers, helps to alter the perceptions of both "sender" and "receiver" with regard to effectiveness.

Based on the aforementioned assumptions, literature review, discussions with co-workers and advisers, and personal observations the following hypotheses about SCS and SWCD personnel and farmers were derived for the study:

1. SCS/SWCD Personnel
   a. SCS and SWCD personnel will perceive communication forms involving personal contact as more effective than communication forms which do not involve personal contact.
   b. SCS and SWCD offices will most frequently use those communication forms which they judge to be the most effective.
   c. The higher the individual effectiveness rating for a communication form by SWCD personnel, the higher its effectiveness rating relative to other communication forms.
2. Farmers
   a. Farmers will perceive communication forms involving personal contact as more effective than

communication forms not involving personal contact.

b. The higher the individual effectiveness rating for a communication form by farmers, the higher its rating relative to other communication forms.

c. Farmers place more trust in conservation information received through a personal contact source than in information received from an impersonal source.

d. The greater degree of trust placed in an individual communication mode by farmers, the higher its trust rating relative to other communication forms.

3. SCS/SWCD Personnel and Farmers

The perceptions of both farmers and SCS and SWCD personnel regarding effectiveness will be similar for those communication forms rated highest in both groups.

D. Limitations of the Study

The limitations of the study are:

1. The study is limited to Clinton, Highland and Warren Counties.
2. The 43 farmers who responded to the questionnaire represent 22.1% of the defined population, and only 2.8 of the farmers listed on the

mailing lists maintained by the ASCS office in each of the study counties.

3. Responses from SCS and SWCD personnel represent the opinions of 10 individuals from three Ohio counties. They are not necessarily representative of all SCS and SWCD personnel or representative of all Ohio counties.
4. Responses from SCS and SWCD personnel and from farmers are limited by their knowledge of and experiences with each of the communication forms, and their ability to accurately evaluate each form based on their knowledge and experiences.
5. The study is limited by the extent of the writer's personal and professional knowledge regarding communication and information dissemination, as well as by her knowledge regarding farmer information programs conducted by the SCS and SWCDs.
6. The accurate evaluation of the effectiveness of the communication media in this study is dependent on the writer's ability to accurately interpret the responses provided by the SCS and SWCD personnel and the farmers of Clinton, Highland and Warren Counties.
7. The application of these results is limited to those agencies and/or institutions which utilize similar

forms of communication and conduct similar types of education and/or information programs.

E. Selection of Sample Population

In order to accomplish these goals and objectives, it became necessary for the writer to identify a group of "senders" and "receivers" to participate in the study. During the time in which this study occurred, the writer was a college intern with the Ohio Environmental Protection Agency (Ohio EPA) in the Office of the Planning Coordinator (OPC). The central focus of the internship was OPC's non-point source pollution abatement program. Hired by OPC to be a member of its field crew, at least 50% of the writer's working hours were devoted to the collection of water quality samples from five predominantly rural counties in southwest and central Ohio. As part of the agency's non-point source pollution abatement program, OPC established contracts with SCS and SWCD offices to assist with water quality monitoring. As a result of this arrangement, the writer had frequent opportunities to make contact with SCS and SWCD personnel, particularly when picking up water samples collected by the district personnel.

Although the writer's field work occurred in five counties, the writer's most frequent interaction with SCS and SWCD personnel took place in Clinton, Highland and Warren Counties, all located in southwest Ohio. In the writer's mind, these three counties were logical ones to provide "senders" and "receivers" for this study. Although the advantage of having an established working relationship with these counties was a primary consideration in their selection for this study, their geographic location, sociological makeup, topography, and willingness to participate in the study were also influential factors.

Geographically, all three counties are located in the southwest quadrant of Ohio. Although the counties are not all contiguous, their relative positions form an "L" with Highland and Clinton Counties forming the short side on a north-south orientation. Each of the counties is within 70 miles of Cincinnati, Ohio and within 75 miles of Columbus, Ohio (Figure 1, p. 32).

Sociologically, each of the counties is predominantly rural with a single central urban area. These urban areas are the county seats, and the locations of the SCS and SWCD offices. The urban centers in Clinton, Highland and Warren Counties are Wilmington, Hillsboro, and Lebanon, respectively. Although each of these counties is experiencing some growth and development in and around their urban centers, the economic foundation of each county is still heavily oriented toward agriculture, with cash grains predominating over livestock farming.

Topographically, each of the counties has variable terrain, ranging from gently rolling to very hilly. In

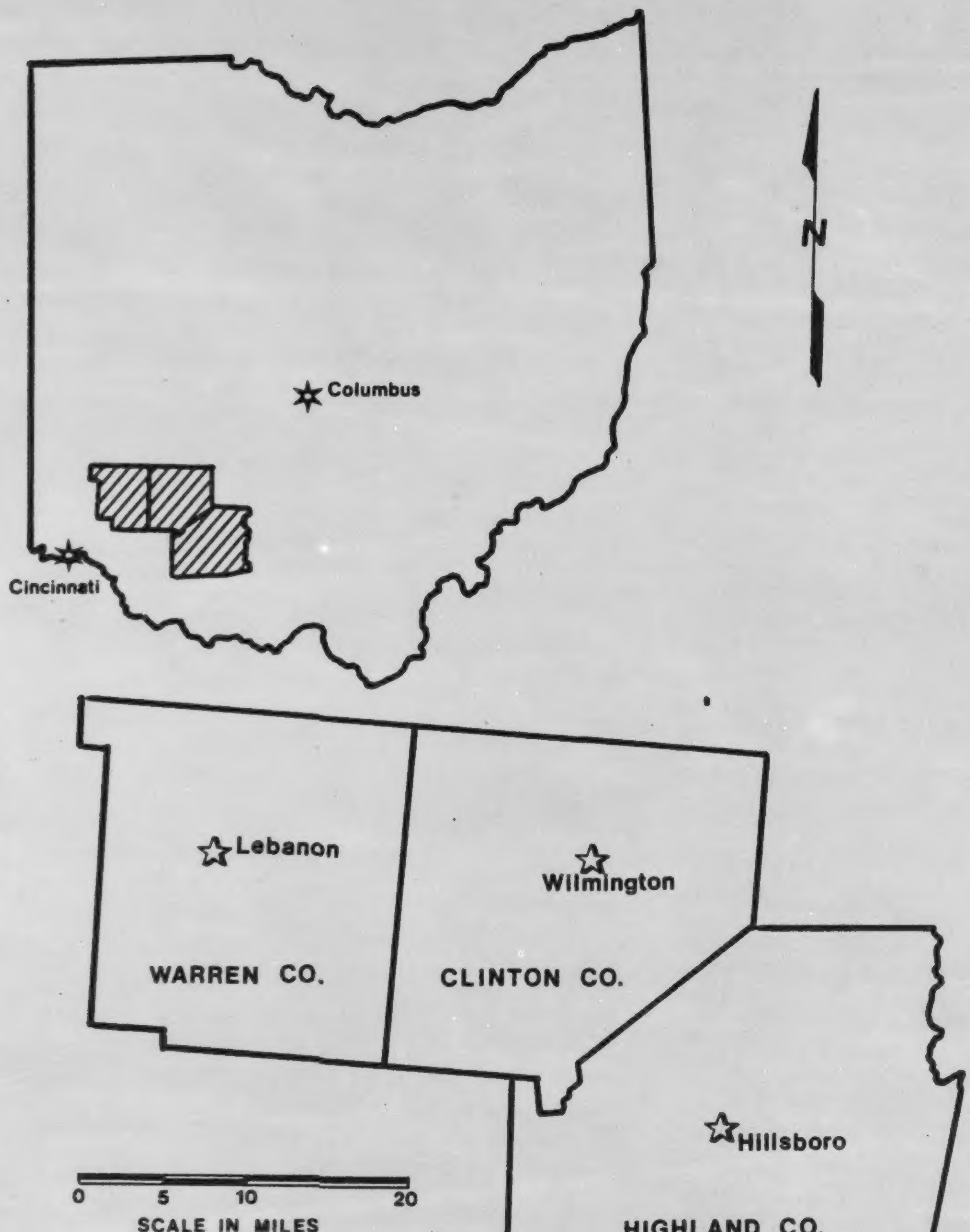
N
Columbus
Cincinnati
Lebanon
Wilmington
WARREN CO.
CLINTON CO.
Hillsboro
HIGHLAND CO.
0
5
10
20
SCALE IN MILES

Figure 1. Location of Clinton, Highland and Warren Counties in Ohio

addition, each county possesses a major watershed which is either part of the Little Miami River Basin (Clinton and Warren Counties), or the Scioto River Basin (Highland County). Although topography alone was not particularly salient in the selection of these counties for this study, it was a determining factor in their selection for the Ohio EPA's non-point source pollution program.

As a member of OPC's field crew, the writer was involved in a working relationship between the individual counties and Ohio EPA. In light of this, it would not have been unreasonable for the writer to take advantage of this relationship in order to gain cooperation from Clinton, Highland and Warren Counties. However, the writer considered this study to be separate from any work done with the counties for the Ohio EPA, and therefore deemed it necessary to personally obtain, at least, a verbal agreement from each county office that it was willing to participate in this study.

Approximately one month in advance of the mailing of the surveys, the writer spoke with each of the district conservationists from Clinton, Highland and Warren Counties. After the writer explained the purposes and intent of the study, each of the district conservationists agreed to volunteer themselves, their SWCD staff members, and their counties for the purpose of this study.

During these conversations the writer, with the assistance of each district conservationist, established a rough estimate of the total number of farmers in each county. These estimates were necessary in order for the writer to have some idea of the total number of farmers who would have the potential to be involved in this study. The estimates were based on figures provided by the Agricultural Stabilization and Conservation Service (ASCS) office in each county. From these figures, the writer estimated a total population of farmers numbering between 6,000 and 7,000 (the number of farmers on the mailing lists, eventually provided, are as follows: Clinton County, 1,980; Highland County, 2,988; and Warren County, 2,120).

After establishing that Clinton, Highland and Warren Counties were to be the locales of this study, the writer proceeded to choose a sample population of "senders" and "receivers". The writer decided to include all SCS and SWCD professional personnel (exclusive of clerical staff) from each county as members of the "sending" population. The writer included all personnel because each county SCS/SWCD office had a staff numbering no more than four persons, including the SCS district conservationist, one to two district technicians, and possibly a soil or agronomy specialist. In addition to each of the district conservationists, the Clinton County office was staffed by two district technicians and an agronomy technician.

Highland County's office was staffed by one district technician, one soil conservation technician, and one soil conservationist. Warren County's staff included two district technicians. Furthermore, the researcher was seeking as much input as possible from the "sender" perspective, and did not consider 11 potential respondents to be an unmanageable size for a population.

Establishing a sample population of "receivers" for this study proved to be much more difficult than establishing a population of "senders". As the researcher quickly learned, the term "farmer" encompasses many types of farm owners and/or operators. The researcher was somewhat perplexed by the farmer classifications "full-time", "part-time", "tenant", "manager", "owner", "operator", "owner/operator", and "cooperator", all of which are terms applicable to farmers. To further complicate matters, there was also the matter of farm size to be considered. Was the researcher interested in surveying only farmers with small acreages, large acreages, or a mix of both? Finally, it was necessary to decide if the population would be comprised purely of district cooperators, purely non-cooperators, or a cross-section of both.

After discussing these issues with co-workers, district conservationists, district technicians, cooperative extension personnel, and the researcher's major adviser, the researcher decided that a truly representative sample of farmers from each county would be comprised of both cooperators and non-cooperators. In addition, the sample could not be biased toward any particular acreage or farmer status.

Having established this set of criteria, the researcher began the process of deciding on a source from which to acquire names of farmers in Clinton, Highland and Warren Counties. The mailing lists compiled by each county's SCS and SWCD office seemed to be the most logical source. However, after discussing this possibility with co-workers, the individual district conservationists, and the researcher's major adviser, the researcher ruled out the use of these mailing lists as a source of names from which to draw a sample population. Two reasons influenced the researcher to disregard the SCS and SWCD mailing list as a source for the study's population of "receivers".

First, only farmers who are SWCD district cooperators are on the list. Because these persons are already working with the SCS and SWCD, the researcher expected the input of these persons to be more positive or supportive with regard to SCS and SWCD communication efforts. As a result of their preconceived ideas about district activities and/or district personnel, their responses to survey questions might tend to bias the results in favor of the district's communication/ education programs.

Second, the actual number of names on the district's mailing list generally fell far short of the total number of farm owners and/or operators in the county. Therefore, selecting persons from this list might not yield a sample population representative of the county.

Further discussion with the three district conservationists, and with a co-worker who had previously been employed with the SCS influenced the researcher's decision to use the mailing lists compiled by the Agricultural Stabilization and Conservation Service (ASCS) office in each county. In order to acquire these lists, it was necessary for the researcher to submit a written request to the state ASCS office which, in turn, submitted a clearance request to the federal ASCS office in order to authorize the county offices to release the mailing lists to the researcher.

The ASCS mailing lists contain the names of the majority of the farmers in each of the counties, both district cooperators and non-cooperators, regardless of the size of the farm and the status of the farmer. ASCS divides its mailing lists by township, and according to whether the farmer is an "owner" (someone who owns acreage, but does not necessarily farm it), or an "operator" (someone who farms acreage, but does not necessarily own it).

The names of the persons classified as both owner and operator occasionally appeared on both the "owner" and "operator" lists. This overlap of names might have caused a problem in the eventual selection of the individuals to be surveyed (if all "owner/operators" names appeared on both lists, then those names would be twice as likely to be drawn as those names listed only on the "owner" or "operator" list. This could result in a sample population more representative of owner/operators). However, each name had a one to three digit number to the left of it which associated the name with a particular parcel of land being owned and/or operated. This number was used in conjunction with a random numbers table in the selection of farmers to be surveyed.

Using a random numbers table and the mailing lists provided by the ASCS office in each county, the researcher selected 195 individuals, approximately 2.8% of the total 7,088 farmers to be surveyed for this study. The researcher selected 65 individuals (one third of 195) for each of the three study counties.

F. Survey Response

Fifty-five of the 195 surveys were returned by May, 1983. However, only 43 of these surveys were usable. The 12 unusable surveys had not been completed by the respondent. Many of the unusable surveys were returned with a letter from the respondent expressing their regrets for not being able to complete the survey. Most of these letters stated that the respondent was elderly and was no longer farming the small acreages (3 to 10 acres) which he or she owned. The 43 usable surveys account for approximately 22%

of the total surveys distributed. The individual county returns are as follows: Clinton County: 17 of 65 surveys (26.2%), Highland County: 13 of 65 surveys (20.0%), and Warren County: 13 of 65 surveys (20.0%).

G. Survey Design

In order to collect data which would reflect the "dual perspective sought by the researcher, it was necessary to design two questionnaires which would reflect the opinions of both sample populations on the central idea "communication forms." The first questionnaire was designed to address the opinions of SCS and SWCD personnel as the "senders" of a message--conservation information. The second questionnaire, sent to county farmers, paralleled the basic content of the agency questionnaire but was designed to address communication of conservation information from the perspective of the "receivers".

The survey distributed to SCS and SWCD personnel (Appendix A) was divided into six sections. Section I addressed the overall communication program of the agencies. Sections II, III, IV and V addressed each of the mass media forms (television, radio, newspapers and magazines). Section VI provided agency personnel with the opportunity to "write in" additional comments which might pertain to the agency's communication efforts but were not addressed in the survey and yet might be of assistance to the researcher in evaluating each agency's communication efforts.

The foundation for questions asked in Section I was 11 forms of communication, which were in common use by most SCS and SWCD offices to inform farmers about conservation. The choice of communication forms was based on discussions with co-workers, SCS and SWCD material filed with annual reports, and personal observations made while visiting SCS and SWCD offices and while attending SCS and SWCD field demonstrations. The following 11 communication forms were provided on the survey because they appeared to be the most common to SCS and SWCD offices and most frequently used to convey conservation information: personal contact, bulletins/flyers, newsletters, newspapers, radio, television, field demonstrations, tours, clinics, magazines and public meetings.

Initially, agency personnel were asked to identify those communication forms which were used by their office to convey conservation information. It was believed that this identification was necessary not only to verify the accuracy of the researcher's assumption about communication forms in common use, but also to provide a basis for later comparison with farmer responses regarding the forms of communication through which they receive conservation information.

The four sets of questions which followed this question were designed to help agency personnel evaluate the effectiveness of the 11 communication forms on an individual basis, relative to each other, from a personal standpoint and from a professional standpoint. In addition, agency personnel were asked to indicate the frequency of use for six of the 11 communication forms (the four mass media forms were evaluated separately whereas the frequency of newsletters was determined from annual reports and newsletters on file). Through the responses to these questions, the researcher intended to gain some idea of the perceptions of agency personnel about their communication efforts. The researcher was particularly interested in each respondent's idea of how useful any one mode of communication was at conveying conservation information. Frequency of use was asked in this series of questions because the researcher felt that frequency would be influenced by the negative or positive attitudes of the agency toward a particular mode of communication.

Sections II and III emphasized conservation information disseminated through television and radio, respectively. The justification of the questions for both sections are discussed together because the researcher treated the two forms of broadcast media similarly within the context of the questionnaire.

The researcher asked a total of 20 questions designed to produce an overall picture of television and radio use by the SCS and SWCD as part of their conservation information programs. Each section contained questions regarding station identification and location, frequency of use (both past and current for television and current for radio), type of broadcasting format used (i.e., commercial, spot, interview, etc.) purposes for which the agencies used either television or radio, reasons for using either form of broadcast media, and how each respondent felt about the amount of use made of each form to convey information about district activities and about conservation.

The location and identification questions were used for comparison with farmer responses to similar questions. The researcher was interested in determining if the agencies were broadcasting from the same stations that the farmers were listening to. If the majority of responses were not the same, then the researcher would have to assume that 1) farmers were not receiving some of the messages intended for them by the agencies, and 2) that the agencies would need to change radio and/or television stations in order to optimize the effectiveness of these media as sources of conservation information.

In asking the agencies about the purposes of their radio and/or television broadcasts, the researcher was interested in determining whether broadcasts were primarily promotional, educational and/or persuasive in nature. A cross-section of responses about the three uses would indicate to the researcher that agencies are aware of the versatility of broadcast media and that the agencies are trying to make use of all the available options to inform farmers about conservation.

The primary reasons for asking why each county uses either television and/or radio was to determine if agencies were aware of the cost effectiveness of either medium, and of their ability to reach a wide range of audiences. In addition, the researcher was interested in determining how influential the actions of one county's office might be on surrounding county offices.

Because our society becomes more technology oriented, it was assumed that television and radio are likely to be sought after and used more frequently in society's efforts to communicate. Although aware that radio and television are not heavily used by the SCS and SWCD, the researcher was interested in the opinions of agency personnel about the amount of broadcast time used for district activities and conservation information.

Section IV contained 10 questions pertaining to the use of newspapers as a source of conservation information. Similar to the organization of Sections II and III, the questions in Section IV were designed to determine the type of format used to convey conservation information (column, feature story, straight news, etc.), the identity of the newspaper, the frequency of use, the purposes behind newspaper coverage, and attitudes concerning the amount of newspaper coverage devoted to district activities and/or conservation information.

In addition to these questions, the researcher included questions regarding the use of news releases and the agency's relationship to the newspaper's farm editor. These two areas of question are particularly significant in order to determine if the agencies are "tooting their own horn" by regularly submitting news releases to newspapers and if they make regular contact with the farm editor. By taking these steps, the agencies could enhance the newspaper coverage of district activities and/or conservation.

Section V was designed to investigate the use of magazines by the SCS and SWCD as a vehicle for conveying conservation information. The researcher's approach to this section was similar to that used in Section IV. The nine questions asked in Section V covered frequency of use, stories/articles written by district personnel and submitted for publication, contact with magazine editors and magazines and attitudes regarding the amount of magazine coverage used to inform farmers about district activities and/or conservation information.

In addition to these questions, the researcher asked agency personnel to identify from a list of five periodicals the magazines which published articles submitted by their agency. Farm Journal, The Ohio Farmer, Buckeye Farm News, Country Living (Ohio publications) and Soil Conservation (USDA) were chosen for this list because the researcher thought they were the magazines most likely to publish district stories. Furthermore, because each of the magazines has a casual, friendly, non-technical style, the researcher believed that these periodicals were also the most likely candidates to be read regularly by farmers and/or to be received as a regular magazine subscription.

The final draft of this survey was distributed to agency personnel in early February, 1983, approximately five weeks in advance of the distribution of the survey for Clinton, Highland and Warren County farmers. The five week interval provided sufficient time for the return of agency responses and for modifications to the farmer survey based on responses from the agencies.

The survey distributed to the farmers of Clinton, Highland and Warren Counties was designed to parallel the survey distributed to SCS and SWCD personnel in each county. The survey was divided into five sections, addressing the respondent's background, evaluating general communication/information media, asking questions regarding mass media as a source of conservation information, assessing farmer contact with SCS and/or SWCD personnel, and providing opportunity for farmers to "write-in" additional comments and/or specify areas of interest which might be included in future SCS and/or SWCD information programs.

The questions asked in Section I about the respondent's background were intended to provide a "sketch" of the survey population. The three questions requested information about the respondent's farmer status (i.e., part-time, full-time, tenant, etc.), the acreage owned and/or operated, and the county in which the respondent owned and/or operated a farm. Questions were not included about the respondent's socio-economic background because the final results and analyses for this study were not dependent on that type of information. Furthermore, it was felt that such questions might reduce the willingness of respondents to complete the survey because of the personal nature of questions regarding socio-economic status.

Knowing the respondent's county was necessary in order to separate responses by county. The questions regarding farmer status and acreage owned and/or operated were included in order to provide the researcher with a "sketch" of the persons who receive conservation information through the SCS and/or SWCD.

The researcher did ask another somewhat personal question of the farmers. The question which appeared in Section IV (Contact with SCS/SWCD Personnel) asked farmers if they were district cooperators. The researcher asked this question based on the assumption that the responses to the survey and the overall attitude of district cooperators to SCS and SWCD communication efforts would be more positive than the responses and attitudes presented by non-cooperators.

The questions asked in Section II (General Communication/Information Media) emphasized the evaluation of 15 potential sources of conservation information. The list of 15 sources included the 11 sources included in the survey distributed to the agencies plus four non-agency related sources indicated by other research to be common information sources known to farmers. The four other sources were equipment dealers, fertilizer dealers, neighbors and agency personnel other than SCS/SWCD personnel.

Initially, farmers were asked to identify the forms of communication through which they received conservation information. The results from this question allowed comparisons with results from the agency questionnaire regarding the forms of communication used to convey conservation information. When comparing results, similarity of responses was sought. Sources of information checked by both agency personnel and by farmers indicated that "sender" and "receiver" are connected by the same information source, thereby increasing the likelihood of a complete message transmission.

Questions 2, 3, 4 and 5 of this section asked farmers to evaluate communication modes both individually and relative to each other with regard to effectiveness in communicating conservation information and with regard to the amount of trust placed in the conservation information received through each source. On an individual basis, farmers were asked to rank each communication mode on a scale of 1 to 4 (1 = lowest opinion, 4 = highest opinion) or "no opinion". Relative to each other, farmers were asked to rank the communication forms from 1 through 15.

Similar to the previous question, rankings from both sample populations which were either identical or fairly close were sought. The similarities or lack of similarities indicated whether or not the agencies were concentrating their energies on the communication forms most trusted and deemed most effective by the farmers. By using those modes of communication, the agencies can increase the probability that farmers will be more receptive to the information conveyed.

While developing this survey, it was kept in mind that district activities such as tours, clinics and workshops were forms of communication to be evaluated. It was found that most agency personnel were in favor of these activities as a way to bring agricultural and/or conservation information to farmers. However, the limited number of attendance figures available for these activities indicated that the number of farmers attending these activities was very inconsistent. These figures varied among the counties and among the activities. Therefore, it was assumed that farmer support (or response) for these activities was highly variable.

While employed as an intern with Ohio EPA, the researcher had access to annual reports and to newsletters and flyers from Clinton, Highland and Warren Counties. From these sources, a list was made of tours, clinics, field days and public meetings which took place during 1982. In addition to the 1982 activities, another list was compiled of annual activities which were common to the three counties being studied. The list was verified by a co-worker previously employed with SCS and by SWCD personnel in each county. Using these lists, Questions 6 and 7 were written.

Question 6 was based on the list of annual activities common to all three counties. These activities are generally well publicized in advance of their occurrence, and most experience what district personnel consider a "good" turnout (30 or more persons in attendance). By asking how many of the farmers actually attended these activities, an indication was provided of the awareness of these activities and how they learned about the activity. Responses to this question also provided an indication as to whether or not farmers considered these activities to be sources of conservation information. The agricultural practices discussed and/or demonstrated by these activities not only enhance agricultural production but also result in the conservation of resources (for example, no-till practices conserve energy, soil and manpower). The purpose of this question was two-fold: 1) to provide the researcher with an indication of other forms of communication which provide farmers with conservation information, and 2) to support or refute the researcher's own thoughts about district activities.

One of the study goals established prior to beginning this study was to recommend to SCS and SWCD offices changes and/or improvements to their current information programs which might facilitate the process of informing farmers about conservation. Informing the district personnel about the topics of interest to farmers is one way of facilitating this process. With this in mind, Question 7 was designed based on the list of special activities which took place in Clinton, Highland or Warren County during 1982. Its purpose was to provide three types of information regarding the activities: 1) the number of persons who attended each activity in order to indicate community awareness of these activities, 2) to indicate which activities should be repeated in the county in which it originated, and 3) to indicate the activities which were sponsored by any one county and sparked enough interest in respondents from outside that county that SCS and SWCD personnel (of the outside count[illegible] might want to consider having a similar activity in their own county (for example, Warren County held an animal waste management clinic. If Clinton County farmers indicate that they are interested in this activity, it would be recommended to the Clinton County SCS and SWCD that an animal waste management clinic be sponsored in their county). If a sufficient number of farmers express interest in the activities of other counties, this might be an indication that SCS and SWCD offices should make an effort to work more closely with each other in their planning efforts.

The researcher divided Section III into four parts in order to collect data on each of the four forms of mass media being studied: radio, television, newspapers and magazines. Each of the sections contained four questions designed to inform the researcher about which communication forms were sources of conservation information, the identity of these sources, and the opinions of farmers regarding the amount of time devoted by each communication form to conservation information. In addition, the researcher was interested in the times of day at which farmers were hearing conservation information on radio, the times of day at which farmers received conservation information through television, where in newspapers farmers were reading about conservation, and what farm or conservation magazines the farmers receive and/or read regularly. The results from these questions would be compared with the results from agency questionnaires in order to determine if the agencies are placing sufficient emphasis on mass media to optimize its effectiveness as a source of conservation information.

Section IV (Contact with SCS/SWCD Personnel) contained four questions related to current and potential contact with SCS and SWCD personnel. Only the first question in Section IV was related to the frequency of farmer contact with SCS and SWCD personnel. The remaining three questions were designed to determine which farmers were district cooperators and which farmers desired either a phone call or a visit from SCS or SWCD personnel. This series of questions served a dual purpose: 1) to determine the frequency of SCS and SWCD personal contacts (specified by all agency respondents as the first choice of communication for conveying conservation information), and 2) to get farmers interested in district cooperator programs.

While attempting to narrow the focus of the questionnaire and limit the number of questions comprising the survey, the researcher was aware that there would be topics of interest and concern to farmers which would not be addressed by the survey. As a result, Section V (Conservation Topics for Future Programs) was provided to give farmers the opportunity to "write in" other areas of interest, as well as areas of concern related to conservation information.

Additional information with regard to question design and justification is found in the section of this study devoted to results. In this section, the researcher stated each survey question individually, and followed it with a detailed statement regarding the question's design and justification. This statement was then followed by the results for each of the questions, respectively. Copies of the surveys distributed to SCS and SWCD personnel, and to the farmers of Clinton, Highland and Warren Counties can be found in Appendices A and B.

H. Organization and Presentation of Results

Responses to the questionnaires were recorded on two separate master sheets. For those questions which requested individual ratings, numeric values were assigned to each degree of effectiveness or trust. An average rating was calculated for each mode of communication by multiplying the total number of responses for each degree of effectiveness or trust by the assigned numeric value, totalling those values, and dividing by the total number of respondents. For the questions which requested relative ratings, the ratings for each communication mode were totalled and averaged. All questions which did not require the rating of communication forms were analyzed and interpreted based on percentages of the sample population.

The results from the questionnaires and more detailed explanations of the steps taken in the analyses of these results are presented in following sections of this paper.

CHAPTER III

THE EFFECTIVENESS OF COMMUNICATION MODES AS EVALUATED BY FARMERS AND SCS AND SWCD PERSONNEL OF CLINTON, HIGHLAND AND WARREN COUNTIES

Part I: Survey Results from Farmers

The following is the analysis of results from a survey distributed to farmers in Clinton, Highland and Warren Counties. The survey was designed to record the opinions of farmers regarding the effectiveness of communication/information formats used by the SCS and SWCD in each county.

The survey results are presented here in the same order as their respective questions appeared in the survey. A description of the survey format is included as a preface to each of the five sections of survey questions. A brief discussion of each survey question includes a summary of the question and the researcher's intent. This discussion is followed by the results of the survey question (county results are in alphabetical order), and then a summary of the results as they apply to the three study counties, overall.

Section I. Respondents' Backgrounds

Section I consisted of three questions designed to provide a "sketch" of the survey respondents. Respondents were asked to identify the county in which they owned and/or operated a farm, their farmer status, and to designate the size of the farm they owned and/or operated.

For the purpose of this study, 195 surveys were distributed to the farmers of Clinton, Highland and Warren Counties in southwest Ohio. Fifty-five surveys were returned (28.20% return). However, only 43 of those surveys were unable. The highest return came from Clinton County (17 of 65 or 26.15%). Highland and Warren Counties had an equal number of returns (13 of 65 or 20.0% for each) (Table 1, p. 56).

The researcher attributed the low percentage of survey returns to two factors: 1) The survey mailing coincided with spring planting in the three study counties. Generally a busy time for most farmers, the researcher speculated that most survey recipients did not complete and return the survey due to lack of time. 2) In order to maintain the anonymity of respondents, the researcher did not follow up on surveys which were not returned. Had the researcher attempted to follow up on surveys which were not returned, the total number of surveys returned might have been significantly higher.

Table 1. Percentage of Surveys Returned By Farmers of Clinton, Highland and Warren Counties

County	Total Number of Surveys Distributed	Number of Surveys Returned	Number of Usable Surveys	Percentage of Usable Surveys Returned
Clinton	65	23	17	26.2
Highland	65	16	13	20.0
Warren	65	16	13	20.0
Total	195	55	43	22.1

Farmer Status

In Clinton County, eight of 17 respondents (47.1%)checked only one classification of farmer status. Five respondents (29.4%) were owners, two (11.8%) were full-time farmers, and one (5.9%) was a part-time farmer. The remaining nine respondents (52.9%) checked more than one classification of farmer status. Four respondents (23.5%) were full-time farmers as well as owners. Two respondents (11.8%) were full-time farmers as well as owners and tenants. One respondent (5.9%) checked the classifications part-time farmer, owner and other (ag. lender). One respondent checked owner and farm manager, and one respondent checked full-time farmer and tenant (Table 2, p. 57).

In Highland County, eight of 13 respondents (61.5%) checked only one classification of farmer status. Four respondents (30.8%) were owners, two respondents (15.4%) were full-time farmers, one (7.7%) was a part-time farmer, and one

Table 2. Farmer Status of Clinton, Highland and Warren County Respondents

	Clinton Respondents		Highland Respondents		Warren Respondents	
	Number	Percent	Number	Percent	Number	Percent
Owner	5	29.4	4	30.8	5	38.5
Full-time Farmer	2	11.8	2	15.4	1	7.7
Part-time Farmer	1	5.9	1	7.7	0	0.0
Full-time Farmer/ Owner	4	23.5	1	7.7	1	7.7
Full-time Farmer/ Tenant	1	5.9	0	0.0	0	0.0
Part-time Farmer/ Owner	0	0.0	2	15.4	6	46.2
Full-time Farmer/ Owner/Tenant	2	11.8	1	7.7	0	0.0
Part-time Farmer/ Owner/Farm Manager	0	0.0	1	7.7	0	0.0
Part-time Farmer/ Owner/Other	1	5.9	0	0.0	0	0.0
Family Partnership	0	0.0	1	7.7	0	0.0
Owner/Farm Manager	1	5.9	0	0.0	0	0.0

was part of a family partnership (category: other). The other five respondents (38.5%) checked more than one category of farmer status. Two respondents (15.4%) were part-time farmers and owners. One respondent (7.7%) was a part-time farmer as well as an owner and a farm manager. One respondent was a full-time farmer, an owner, and a tenant farmer, and one was a full-time farmer and an owner (Table 2, p. 57).

The majority of Warren County respondents (84.6%) categorized themselves as either farm owners (38.5%) or part-time farmers and owners (46.2%). Aside from these categories, one respondent (7.7%) checked the category full-time farmer; and one respondent checked full-time farmer and owner (Table 2, p. 57).

Overall, the largest category of farmers was owners. Fourteen respondents (32.6%) checked this status. Following this group were respondents who categorized themselves as part-time farmers as well as owners; and respondents who categorized themselves with three statuses. Both groups were comprised of eight respondents (18.6%). Full-time farmers who were also owners were the third largest group with six respondents (13.9%). The smallest groups were full-time farmers (11.6%), and part-time farmers (4.7%) (Table 3, p. 59).

Table 3. Summary of Farmer Status for Clinton, Highland and Warren Counties

Status	Number of Respondents	Percentage of Respondents
Owners	14	32.6
Part-time farmers/owners	8	18.6
Full-time farmers/owners	6	13.9
Full-time farmers	5	11.6
Part-time farmers	2	4.7
Full-time farmer/owner/ tenant	3	7.0
Miscellaneous status	5	11.6

Size of Farm

The respondents of Clinton County were fairly well divided among the acreage groupings provided by the researcher for farm sizes. The largest group with seven respondents (35.3%) owned and/or operated a farm of less than 100 acres in size. Owners and/or operators of farms 100 to 250 acres or 250 to 500 acres in size were equally divided. Each group was checked by four respondents (23.5% for each group). The smallest group consisted of owners and/or operators of farms 500 to 1000 acres in size. This group contained three respondents (17.7%). None of the respondents owned and/or operated acreage greater than or equal to 1000 acres (Table 4, p.60).

Table 4. Size of Respondents' Farms

Size of Farms (acres)	Clinton Respondents		Highland Respondents		Warren Respondents		All Counties Respondents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 100	6	35.3	6	46.2	11	84.6	23	53.5
100 to 250	4	23.5	3	23.1	2	15.4	9	20.9
250 to 500	4	23.5	2	15.4	--	--	6	13.9
500 to 1000	3	17.7	2	15.4	--	--	5	11.6

Within the three study counties, the majority of respondents (74.4%) owned and/or operated acreage less than 100 acres in size, or 100 to 250 acres in size. The largest portion of respondents (53.5%) were owners and/or operators of farmers less than 100 acres in size. This was particularly true of Warren County, in which 84.6% of the respondents from this county were in this category. Farms ranging in size from 100 to 250 acres was the next largest grouping, comprised of 20.9% of the total respondents. Respondents in the categories 250 to 500 acres, and 500 to 1000 acres were almost equally divided. The former was comprised of 13.9% of the respondents, and the latter comprised of 11.6% of the respondents. None of the respondents owned and/or operated farmes greater than or equal to 1000 acres (Table 4, p. 60).

Section II. General Communication/Information Media

Section II contained seven questions designed to record the opinions of farmers regarding communication/information formats used by the SCS and the SWCD. The questions were based on 15 information sources common to all three study counties. Respondents were asked to identify sources of information from which they had received conservation information. In addition, four questions asked respondents to rate or rank the 15 communication forms, individually or collectively, in terms of effectiveness and trustworthiness.

The last two questions of this section were based on the annual and special activities sponsored by the SCS/SWCD offices in the study counties. From these questions, the researcher determined if farmers in the study counties had overlapping interests in conservation topics, and if respondents considered any of the annual or special activities to be sources of conservation information.

Forms of Communication Through Which Conservation Information is Received

Question 1 provided a list of 15 communication forms through which conservation information is disseminated. Respondents were asked to check all those communication forms from which they received conservation information. This question generated a list of "receiver" communication modes which were compared with a similar list of "sender" communication modes. From these lists the researcher determined if both "senders" and "receivers" were relying on the same communication channels.

In Clinton County, newspapers and the SCS/SWCD bulletin/flyer were the most frequently chosen sources of conservation information. Newspapers were chosen by 76.5% of Clinton County respondents. The SCS/SWCD bulletin/flyer was chosen by 70.6% of the respondents. Personal contact with SCS and SWCD personnel and radio were the third most frequently chosen sources of conservation information. Both forms of communication were chosen by 47.1% of the respondents. Magazines was the fourth most frequently chosen source with 41.2% of the respondents. The district newsletter was fifth among sources of conservation information. It was chosen by 35.3% of the Clinton County respondents (Table 5, p. 64).

The remaining 10 communication forms were chosen by a substantially smaller portion of the sample population. Public meetings and neighbors were each chosen by 29.4% of the respondents. Tours were chosen by 23.5% of the respondents. Television, field demonstrations, clinics/ workshops, equipment dealers, and fertilizer dealers each were chosen by 17.7% of the respondents. Agency personnel other than the SCS and SWCD personnel were chosen by the smallest percentage of respondents (5.9%) (Table 5, p. 64).

In Highland County, the SCS/SWCD bulletin/flyer, personal contact with SCS and SWCD personnel, neighbors, radio and newspapers were the five most frequently chosen sources of conservation information. The SCS/SWCD bulletin/flyer was chosen by 76.9% of the respondents, personal contact by 69.2%, neighbors and radio both by 61.5%, and newspapers by 53.9% of the Highland County respondents (Table 5, p. 64).

The remaining 10 communication forms were chosen as sources of conservation information by less than 50% of the Highland County respondents. Field demonstrations, magazines, and public meetings were each chosen by 38.5% of the

Table 5. Forms of Communication Identified by Farmers of Clinton, Highland and Warren Counties as Sources of Conservation Information.

Communication Form	Clinton Respondents number	Clinton Respondents percent	Highland Respondents number	Highland Respondents percent	Warren Respondents number	Warren Respondents percent
Agency Personnel other than SCS/SWCD	1	5.9	2	15.4	0	0.0
Clinics/Workshops	3	17.7	0	0.0	0	0.0
District Newsletter	6	35.3	4	30.8	9	69.2
Equipment Dealers	3	17.7	2	15.4	1	7.7
Fertilizer Dealers	3	17.7	3	23.1	2	15.4
Field Demonstrations	3	17.7	5	38.5	0	0.0
Magazines	7	41.2	5	38.5	5	38.5
Neighbors	5	29.4	8	61.5	2	15.4
Newspapers	13	76.5	7	53.9	7	53.9
Personal Contact with SCS or SWCD Personnel	8	47.1	9	69.2	8	61.5
Public Meetings	5	29.4	5	38.5	3	23.1
Radio	8	47.1	8	61.5	2	15.4
SCS/SWCD Bulletin/Flyer	12	70.6	10	76.9	7	53.9
Television	3	17.7	3	23.1	1	7.7
Tours	4	23.5	4	30.8	1	7.7

respondents. The district newsletter and tours were each chosen by 30.8% of the respondents. Television and fertilizer dealers were both chosen by 23.1% of the survey respondents. Equipment dealers and other agency personnel were both chosen by 15.4% of respondents. Clinics/Workshops was not chosen by any of the survey respondents as a source of conservation information (Table 5, p. 64).

Warren County respondents indicated that the district newsletter, personal contact with SCS and SWCD personnel, the SCS/SWCD bulletin/flyer, newspapers and magazines were the five most frequently chosen sources of conservation information. The district newsletter was chosen by 69.2% of the survey respondents. Personal contact with SCS and SWCD personnel was chosen by 61.5% of survey respondents. The SCS/SWCD bulletin/flyer and newspapers were both chosen by 53.9% of the respondents. Magazines was chosen by 38.5% of the Warren County respondents (Table 5, p. 64).

The remaining 10 communication forms were chosen by less than 25% of the survey respondents. Public meetings were chosen by 23.1% of the respondents. Radio, fertilizer dealers, and neighbors were each chosen by 15.4% of the respondents. Field demonstrations, Clinics/Workshops, and agency personnel other than SCS and SWCD personnel were not chosen by any of the Warren County respondents as sources of conservation information (Table 5, p. 64).

Within the three counties surveyed by the researcher, the SCS/SWCD bulletin/flyer, personal contact with SCS and SWCD personnel, the district newsletter, and radio were the communication forms most frequently chosen as sources of conservation information. Of the 43 survey respondents, 67.4% chose the SCS/SWCD bulletin/flyer, 62.8% chose newspapers, 58.1% chose personal contact with SCS and SWCD personnel, 44.2% chose the district newsletter, and 41.9% chose radio (Table 6, p. 67).

The other 10 communication forms were ranked as follows: 6) magazines (39.5%), 7) neighbors (34.9%), 8) public meetings (30.2%), 9) tours (20.9%), 10) field demonstrations and fertilizer dealers (18.6% each), 11) television (16.3%), 12) equipment dealers (14.0%), and 13) clinics/workshops and other agency personnel (7.0% each) (Table 6, p. 67).

The SCS/SWCD bulletin/flyer was among the first three sources of conservation information chosen by survey respondents in each of the study counties. Newspapers were the first choice of Clinton County respondents, but the fourth choice of both Highland and Warren County respondents. Personal contact was either the second or third source of conservation information chosen by respondents. The district newsletter was the highest ranked source of conservation information in Warren County, but the fifth ranked source in Clinton County. In Highland County, the district newsletter

Table 6. Summary of Communication Forms Identified by Farmers of Clinton, Highland and Warren Counties as Sources of Conservation Information

Communication Form	Total Respondents	
	Number	Percent
SCS/SWCD Bulletin/Flyer	29	67.4
Newspapers	27	62.8
Personal Contact with SCS or SWCD Personnel	25	58.1
District Newsletter	19	44.2
Radio	18	41.9
Magazines	17	39.5
Neighbors	15	34.9
Public Meetings	13	30.2
Tours	9	20.9
Field Demonstrations	8	18.6
Fertilizer Dealers	8	18.6
Television	7	16.3
Equipment Dealers	6	14.0
Clinics/Workshops	3	7.0
Agency Personnel other than SCS/SWCD	3	7.0

did not rank among the first five sources of conservation information. Although radio ranked fifth overall, only in Highland County was it ranked among the first five sources of conservation information.

Effectiveness of communication forms at providing conservation information

Question 2 asked respondents to rank 15 communication forms in terms of how well each form provided conservation information. Respondents were asked to rank the forms relative to each other on a scale of one to 15. However, the majority of respondents did not assign a single value to each form, but used a variety of abbreviated scales in order to rank each form. As a result, the researcher analyzed the results of the question on a scale of 0 to 8 for all counties, rather than on the intended scale of one to 15. In the process of analyzing the data all values were used as given by the respondents. In addition, the researcher assigned a value of zero to all communication forms not ranked. The values assigned by the respondents were totalled for each communication form, and averaged based on the total number of returned surveys for each county.

Clinton County respondents indicated that the district newsletter, magazines, the SCS/SWCD bulletin/flyer, personal contact with SCS and SWCD personnel, and newspapers (in rank order of twelfth through fourteenth) were the communication forms which were least effective at providing conservation information (Table 7, p. 70).

According to the survey results from Highland County farmers, the five communication forms most effective at providing conservation information were 1) tours, 2) field demonstrations, 3) public meetings, 4) personal contact with SCS and SWCD personnel, and 5) the district newsletter. Respondents ranked magazines, the SCS/SWCD bulletin/flyer, and newspapers as twelfth, thirteenth, and fourteenth, in order of effectiveness at providing conservation information (Table 7, p. 70).

Survey results from Warren County farmers indicated that personal contact with SCS and SWCD personnel, the district newsletter, the SCS/SWCD bulletin/flyer, neighbors, and field demonstrations were the five most effective forms of communication at providing conservation information (in rank order first through fifth). Respondents rated agency personnel other than SCS and SWCD personnel, public meetings and television as the least effective modes of communication in terms of their ability to provide conservation information (Table 7, p. 70).

An analysis of the responses from all three study counties revealed that the five communication modes which were most effective at providing conservation information

Table 7. Forms of Communication Ranked by Farmers of Clinton, Highland and Warren Counties According to How Well Each Form Provides Conservation Information

Communication Form	Clinton Average No. of Points	Clinton Rank	Highland Average No. of Points	Highland Rank	Warren Average No. of Points	Warren Rank
Agency Personnel other than SCS/SWCD	6.35	14	3.9	10	3.3	11
Clinics/Workshops	6.06	12	3.0	6	2.3	7
District Newsletter	3.59	1	2.3	5	1.3	2
Equipment Dealers	5.05	9	3.9	9	3.2	10
Fertilizer Dealers	4.82	7	3.2	8	2.5	8
Field Demonstrations	5.41	11	1.8	2	2.0	5
Magazines	4.06	2	4.2	12	2.3	7
Neighbors	4.76	6	3.2	8	1.9	4
Newspapers	4.59	5	5.2	14	3.0	9
Personal Contact with SCS or SWCD Personnel	4.29	4	2.2	4	0.9	1
Public Meetings	5.00	8	2.1	3	3.5	12
Radio	5.35	10	4.1	10	3.2	10
SCS/SWCD Bulletin/ Flyer	4.11	3	4.3	13	1.6	3
Television	6.18	13	3.1	7	---	--
Tours	5.41	11	1.0	1	2.2	6

were: 1) the district newsletter, 2) personal contact with SCS and SWCD personnel, 3) tours, 4) field demonstrations, and 5) the SCS/SWCD bulletin/flyer. Furthermore, the analysis also revealed that radio, television, and agency personnel other than SCS and SWCD personnel were the least effective at providing conservation information. These forms ranked twelfth, thirteenth and fourteenth, respectively (Table 8, p. 72).

Question 3 asked respondents to rate 15 forms of communication in terms of their effectiveness at providing conservation information. The researcher provided respondents with a rating scale of one to four, and no opinion. To each numeric rating, the researcher assigned the following degrees of effectiveness: 1 = not effective, 2 = somewhat effective, 3 = effective, and 4 = very effective. Unlike Question 2 which asked respondents to rate the effectiveness of the communication forms relative to each other, Question 3 asked respondents to rate each communication form unto itself.

In order to analyze the results of this question, the researcher assigned a point value to each degree of effectiveness. For each response of "no opinion" the researcher assigned a point value of one. For "not effective" a point value of two. "Somewhat effective" was assigned a point value of three, "effective" a point value of four, and "very

Table 8. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties Based on How Well Each Form Provides Conservation Information

Communication Form	Average No. of Points	Rank
District Newsletter	2.5	1
Personal Contact with SCS or SWCD Personnel	2.6	2
Tours	3.1	3
Field Demonstrations	3.3	4
SCS/SWCD Bulletin/Flyer	3.4	5
Neighbors	3.4	5
Magazines	3.6	6
Fertilizer Dealers	3.6	6
Public Meetings	3.7	7
Equipment Dealers	4.1	8
Clinics/Workshops	4.1	8
Newspapers	4.3	9
Radio	4.3	9
Television	4.7	10
Agency Personnel other than SCS/SWCD	4.7	10

effective a point value of five. No points were given for surveys with no responses.

For each communication form, the number of responses for each degree of effectiveness was tabulated and multiplied by its corresponding point value. These final values were totaled and divided by the number of possible respondents in order to arrive at an average rating.

In Clinton County, four of 15 communication modes received average ratings of 3.0 or better on a scale of 4.0. These four modes, considered "effective" by respondents, were the SCS/SWCD bulletin/flyer (3.29), newspapers (3.12), clinics/workshops (3.06) and magazines (3.0). Following these were tours (2.9), personal contact with SCS/SWCD (2.9), public meetings (2.8), field demonstrations (2.8), the district newsletter (2.7), radio (2.7), equipment dealers (2.4), neighbors (2.3), television (2.2), and fertilizer dealers (2.12). Each of these forms were considered "somewhat effective". Agency personnel other than SCS/SWCD received the lowest average rating (1.8) (Table 9, p. 74).

Highland County respondents gave four of 15 communication forms average ratings of 3.0 or better. The highest rating was 3.92 for personal contact with SCS/SWCD, followed by SCS/SWCD bulletin/flyer (3.38), and district newsletter and newspapers (3.0), radio (2.92), neighbors (2.46), and field demonstrations (2.15) were all considered "somewhat

Table 9. Effectiveness of Communication Modes at Providing Conservation Information as Rated by Clinton County Farmers

Communication Form	Number of Respondents/Degree of Effectiveness							
	Not Effective	Somewhat Effective	Effective	Very Effective	No Opinion	No Response	Average Rating	Rank
Agency Personnel Other Than SCS/SWCD	3	3	1	1	6	3	1.8	15
Clinics/Workshops	4	4	4	3	1	2	3.1	3
District Newsletter	1	5	3	3	2	3	2.7	9
Equipment Dealers	3	6	4	0	1	3	2.4	11
Fertilizer Dealers	4	4	5	0	1	3	2.1	14
Field Demonstrations	4	3	6	1	1	1	2.8	8
Magazines	1	5	7	1	1	2	3.0	4
Neighbors	1	7	3	2	1	3	2.3	12
Newspapers	3	4	5	3	0	2	3.1	2
Personal Contact with SCS or SWCD Personnel	3	1	4	4	4	1	2.9	6
Public Meetings	1	5	7	0	2	2	2.8	7
Radio	2	7	5	0	0	3	2.7	10
SCS/SWCD Bulletin/Flyer	3	4	7	2	1	0	3.3	1
Television	4	7	2	0	1	3	2.2	13
Tours	4	3	4	3	2	2	2.9	5

effective" with ratings between 2.0 and 3.0. The remaining eight communication forms, public meetings (1.92), fertilizer dealers (1.85), tours (1.8), clinics/workshops and magazines (1.77), television (1.69), equipment dealers (1.54) and agency personnal other than SCS/SWCD (1.46), were considered "not effective" with average ratings between 1.0 and 2.0 (Table 10, p. 76).

Warren County respondents gave two of 15 communication forms average forms ratings of 3.0 or better. Personal contact with SCS/SWCD (3.23) and SCS/SWCD bulletin/flyer (3.08) were considered "effective". Magazines and public meetings (2.38), the district newsletter (2.31), and newspapers (2.0 were considered "somewhat effective" with average ratings between 2.0 and 3.0. Radio (1.85), equipment dealers (1.77), fertilizer dealers (1.69), clinics/workshops (1.54), television (1.46), agency personnel other than SCS/SWCD (1.38), neighbors (1.31), field demonstrations (1.23) and tours (1.15) were considered "not effective" with average ratings between 1.0 and 2.0 (Table 11, p. 77).

Overall, only two of the 15 communication forms were rated by the 43 respondents as effective; personnel contact with SCS/SWCD (3.30) and SCS/SWCD bulletin/flyer (3.28). Following these were the district newsletter (2.77), newspapers (2.74), radio (2.49), magazines (2.44), public meetings (2.39), tours (2.22), clinics (2.21), and

Table 10. Effectiveness of Communication Modes at Providing Conservation Information as Rated by Highland County Farmers

Communication Form	Not Effective	Somewhat Effective	Effective	Very Effective	No Opinion	No Response	Average Rating	Rank
	Number of Respondents/Degree of Effectiveness							
Agency Personnel other than SCS/SWCD	0	0	1	2	5	5	1.46	13
Clinics/Workshops	0	4	0	2	1	6	1.77	10
District Newsletter	1	1	3	4	2	2	3.00	3
Equipment Dealers	1	3	2	0	1	6	1.54	12
Fertilizer Dealers	2	4	2	0	0	5	1.85	8
Field Demonstrations	2	0	2	3	1	5	2.15	6
Magazines	1	4	2	0	1	5	1.77	10
Neighbors	1	1	4	2	1	4	2.46	5
Newspapers	0	6	4	1	0	2	3.00	3
Personal Contact e/SCS or SWCD Personnel	1	2	2	7	0	1	3.92	1
Public Meetings	2	2	1	2	1	5	1.92	7
Radio	1	5	4	1	0	3	2.92	4
SCS/SWCD Bulletin/Flyer	0	2	3	5	1	2	3.38	2
Television	2	3	0	1	4	3	1.69	11
Tours	1	2	2	3	0	5	1.80	9

Table 11. Effectiveness of Communication Modes at Providing Conservation Information as Rated by Warren County Farmers

	Number of Respondents/Degree of Effectiveness							
Communication Forms	Not Effective	Somewhat Effective	Effective	Very Effective	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	1	0	0	2	6	4	1.38	11
Clinics/Workshops	2	0	2	1	3	5	1.54	9
District Newsletter	2	0	5	2	1	3	2.31	4
Equipment Dealers	1	1	1	2	4	4	1.77	7
Fertilizer Dealers	1	1	2	1	4	4	1.69	8
Field Demonstrations	1	2	1	0	4	5	1.23	13
Magazines	2	1	2	3	1	4	2.38	3
Neighbors	1	1	2	0	4	5	1.31	12
Newspapers	3	2	2	1	1	4	2.00	5
Personal Contact w/SCS or SWCD Personnel	3	0	0	7	1	2	3.23	1
Public Meetings	1	2	3	2	1	4	2.38	3
Radio	3	1	2	1	2	4	1.85	6
SCS/SWCD Bulletin/Flyer	2	0	5	3	1	2	3.08	2
Television	1	1	0	2	4	5	1.46	10
Tours	2	1	1	0	4	5	1.15	14

fertilizers (2.02). These were considered "somewhat effective" by farmers. Field demonstrations (1.98), equipment dealers (1.95), television (1.84), and agency personnel other than SCS and SWCD were considered "not effective" (Table 12, p. 79).

Trust Placed in Conservation Information Received from Communication Forms

Question 4 asked farmers to rank 15 communication forms based on the amount of trust they placed in the conservation information they received from each source. The communication forms were rated relative to each other on a scale of one to 15 (1 = most trust, 15 = least trust). However, similar to Question 2, the majority of respondents did not assign an individual rating to each communication mode, but rather used only parts of the scale. As a result, the researcher analyzed the responses to this question based on a scale of one to eight.

Clinton County farmers placed the most trust in conservation information received from personal contact with the SCS or SWCD personnel, the district newsletter, tours, field demonstrations, and the SCS/SWCD bulletin/flyer. These five communication forms were ranked first through fifth, respectively. Farmers indicated that they placed the least amount of trust in conservation information which they received from

Table 12. Summary of the Effectiveness of Communication Modes at Providing Conservation Information as Rated by Farmers of Clinton, Highland and Warren Counties

	Number of Respondents/Degree of Effectiveness							
Communication Forms	Not Effective	Somewhat Effective	Effective	Very Effective	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	4	3	2	5	17	12	1.56	14
Clinics/Workshops	6	8	6	6	5	13	2.21	9
District Newsletter	4	6	11	9	4	8	2.77	3
Equipment Dealers	5	10	7	2	6	13	1.95	12
Fertilizer Dealers	7	9	9	1	5	12	2.02	10
Field Demonstrations	7	5	9	4	6	11	1.98	11
Magazines	4	10	11	4	3	11	2.44	6
Neighbors	3	9	9	4	6	12	2.21	9
Newspapers	6	12	11	5	1	8	2.74	4
Personal Contact w/SCS or SWCD Personnel	7	3	6	18	5	4	3.30	1
Public Meetings	4	9	11	4	4	11	2.39	7
Radio	6	13	11	2	2	1-	2.49	5
SCS/SWCD Bulletin/Flyer	3	6	15	10	3	4	3.28	2
Television	7	11	2	3	9	12	1.84	13
Tours	7	6	7	6	6	12	2.22	8

newspapers, television and radio. These forms ranked twelfth, thirteenth, and fourteenth, respectively (Table 13, p. 81).

Highland County respondents placed the most trust in conservation information received from personal contact with SCS and SWCD personnel, tours, public meetings, field demonstrations, and the district newsletter. These forms of communication ranked first through fifth, respectively. Farmers placed the least amount of trust in conservation information received from equipment dealers, agency personnel other than SCS and SWCD personnel, and newspapers. These forms ranked twelfth, thirteenth, and fourteenth, respectively (Table 13, p. 81).

Warren County farmers indicated that they placed the most trust in conservation information which they received from personal contact with SCS and SWCD personnel, field demonstrations, magazines, the SCS/SWCD bulletin/flyer, and the district newsletter. These forms of communication were ranked first through fifth, respectively. Survey results further indicated that farmers placed the least amount of trust in conservation information which they received through equipment dealers, agency personnel other than SCS and SWCD personnel, and television. These forms were ranked twelfth, thirteenth, and fourteenth, respectively (Table 13, p. 81).

Table 13. Forms of Communication Ranked by Farmers of Clinton, Highland and Warren Counties According to the Amount of Trust Placed in Conservation Information Received

	CLINTON		HIGHLAND		WARREN	
Communication Form	Average No. of Points	Rank	Average No. of Points	Rank	Average No. of Points	Rank
Agency Personnel other than SCS/SWCD	5.94	11	4.69	13	5.58	13
Clinics/ Workshops	5.23	8	3.00	6	3.50	7
District Newsletter	3.94	2	2.54	5	2.92	5
Equipment Dealers	5.76	10	4.46	12	5.33	12
Fertilizer Dealers	4.88	6	4.38	11	4.25	8
Field Demonstrations	4.47	4	1.54	4	2.67	2
Magazines	5.41	9	3.62	7	2.75	3
Neighbors	5.00	7	3.92	10	3.33	6
Newspapers	6.35	12	5.00	14	5.25	11
Personal Contact w/SCS or SWCD Personnel	3.41	1	1.15	1	1.75	1
Public Meetings	5.41	9	1.38	3	4.92	10
Radio	7.70	14	3.77	9	4.50	9
SCS/SWCD Bulletin/Flyer	4.76	5	3.62	7	2.83	4
Television	6.65	13	3.69	8	6.42	14
Tours	4.17	3	1.31	2	--	--

The analysis of the results from all three study counties revealed that farmers place the most trust in conservation information which they receive through personal contact with SCS and SWCD personnel, tours, field demonstrations, the district newsletter, and the SCS/SWCD bulletin/flyer. Farmers ranked these forms first through fifth, respectively. In addition, survey results revealed that farmers placed the least amount of trust in the conservation information which they receive through radio, newspapers, and television. These forms were ranked thirteenth, fourteenth, and fifteenth, respectively (Table 14, p. 83).

Question 5 asked respondents to rate the 15 communication forms in terms of the amount of trust which they placed in the conservation information they received from each source. The respondents were given a numeric scale from one to four by which to rate each communication mode. Each numeric rating also had a corresponding written description of a degree of trust (assigned by the researcher). "No trust" was assigned to the value 1, "very little trust" to the value 2, "some trust" to the value 3, and "great deal of trust" to the value 4. Respondents were also given the option of marking "no opinion" for any or all of the communication forms.

In order to analyze the responses, the researcher assigned a point value to each of the possible responses.

Table 14. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties According to Trust Placed in Conservation Information Received

Communication Form	Average Rating	Rank
Personal Contact w/SCS or SWCD	2.19	1
Tours	2.86	2
Field Demonstrations	2.98	3
District Newsletter	3.14	4
SCS/SWCD Bulletin/Flyer	3.77	5
Public Meetings	3.93	6
Clinics/Workshops	3.95	7
Magazines	4.00	8
Neighbors	4.09	9
Fertilizer Dealers	4.44	10
Equipment Dealers	5.12	11
Agency Personnel other than SCS/SWCD	5.32	12
Radio	5.44	13
Newspapers	5.49	14
Television	5.53	15

A one point value was given to each response of "no opinion", two points for "no trust", three points for "very little trust", four points for "some trust", and five points for "great deal of trust". No points were given for surveys with no responses.

For each communication form, the number of responses for each degree of trust was tabulated and multiplied by its corresponding point value. These final figures were totaled and divided by the number of possible respondents in order to arrive at an average rating.

Clinton County respondents placed "some trust" in only two modes of communication: SCS/SWCD bulletin/flyer (3.24) and personal contact with SCS/SWCD (3.18). Those forms in which farmers placed "very little trust" were newspapers (2.94), the district newsletter (2.88), field demonstrations (2.65), tours (2.53), public meetings (2.47), clinics/ workshops and magazines (2.41), radio and equipment dealers (2.35), television (2.24), fertilizer dealers (2.18), and neighbors (2.06). Farmers placed "no trust" in agency personnel other than SCS/SWCD (1.88) (Table 15, p. 85).

Highland County respondents placed "great trust" in SCS/SWCD bulletin/flyer (4.23) and in personal contact with SCS/SWCD (4.08). Respondents put "some trust" in radio (3.46), newspapers (3.38) and district newsletter (3.31). "Very little trust" was placed in field demonstrations (2.92),

Table 15. Communication Forms Ranked by Clinton County Farmers According to the Amount of Trust Placed in Conservation Information Received

	Number of Respondents/Degree of Trust							
Communication Form	No Trust	Little Trust	Some Trust	Great Trust	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	1	3	2	2	3	5	1.88	13
Clinics/Workshops	1	1	7	1	3	4	2.41	8
District Newsletter	0	1	7	3	3	3	2.88	4
Equipment Dealers	1	5	4	1	2	4	2.35	9
Fertilizer Dealers	1	3	2	3	3	5	2.18	11
Field Demonstrations	1	2	9	0	1	4	2.65	5
Magazines	0	4	7	0	1	5	2.41	8
Neighbors	1	3	3	2	2	5	2.06	12
Newspapers	1	5	4	3	2	2	2.94	3
Personal Contact w/SCS or SWCD Personnel	0	0	5	6	4	2	3.18	2
Public Meetings	0	2	7	1	3	4	2.47	7
Radio	1	4	3	2	4	2	2.35	9
SCS/SWCD Bulletin/ Flyer	0	0	9	3	4	1	3.24	1
Television	1	3	6	0	3	5	2.24	10
Tours	1	1	9	0	2	4	2.53	6

neighbors (2.85), agency personnel other than SCS/SWCD (2.23), fertilizer dealers (2.15), and tours and public meetings (2.0). "No trust" was placed in magazines (1.92), clinics/workshops (1.85), and television and equipment dealers (1.54) (Table 16, p. 87).

Warren County respondents placed "some trust" in personal contact with SCS/SWCD (3.38) and in SCS/SWCD bulletin/flyer and district newsletter (3.31). "Very little trust" was placed in public meetings (2.31) and newspapers (2.23). Respondents put "no trust" in field demonstrations and fertilizer dealers (1.85), equipment dealers (1.77), radio and magazines (1.69), neighbors (1.54), television (1.38), tours and clinics/workshops (1.31), and agency personnel other than SCS/SWCD (1.15) (Table 17, p. 88).

Within the three study counties, farmers placed "some trust" in SCS/SWCD bulletin/flyer (3.56), personal contact with SCS/SWCD, and district newsletter (3.14). "Very little trust" was placed in newspapers (2.86), radio and field demonstrations (2.49), public meetings (2.28), neighbors (2.14), fertilizer dealers (2.07), magazines (2.05), and tours (2.0). Farmers placed "no trust" in equipment dealers (1.93), clinics/workshops (1.91), and television and agency personnel other than SCS/SWCD (1.77) (See Table 18, p. 89).

Table 16. Communication Forms Ranked by Highland County Farmers According to the Amount of Trust Placed in Conservation Information Received

	Number of Respondents/Degree of Trust							
Communication Form	No Trust	Little Trust	Some Trust	Great Trust	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	0	1	2	3	3	5	2.23	8
Clinic/Workshops	1	1	3	1	2	5	1.85	12
District Newsletter	0	0	4	5	2	3	3.31	5
Equipment Dealers	2	2	2	0	2	5	1.54	13
Fertilizer Dealers	2	1	5	0	1	4	2.15	9
Field Demonstrations	1	1	3	4	1	3	2.92	6
Magazines	1	2	4	0	1	5	1.92	11
Neighbors	1	0	5	3	0	4	2.85	7
Newspapers	0	1	9	1	0	2	3.38	4
Personal Contact w/SCS or SWCD Personnel	0	0	3	3	1	1	4.08	2
Public Meetings	1	0	3	2	2	5	2.00	10
Radio	0	1	8	2	0	3	3.46	3
Television	0	4	0	1	3	5	1.54	13
Tours	1	1	1	3	2	5	2.00	10

Table 17. Communication Forms Ranked by Warren County Farmers According to the Amount of Trust Placed in Conservation Information Received

Communication Forms	Number of Respondents/Degree of Trust No Trust	Little Trust	Some Trust	Great Trust	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	1	1	2	0	2	5	1.15	11
Clinics/Workshops	1	0	1	2	1	7	1.31	10
District Newsletter	1	0	4	5	0	2	3.31	2
Equipment Dealers	1	1	3	1	1	5	1.77	6
Fertilizer Dealers	1	0	4	1	1	5	1.85	5
Field Demonstrations	0	1	0	4	1	6	1.85	5
Magazines	2	0	2	2	0	6	1.69	7
Neighbors	0	2	2	1	1	6	1.54	8
Newspapers	3	2	3	1	0	3	2.23	4
Personal Contact w/SCS or SWCD Personnel	1	0	3	6	0	2	3.38	1
Public Meetings	0	2	2	3	1	4	2.31	3
Radio	3	1	2	1	0	5	1.69	7
SCS/SWCD Bulletin/ Flyer	1	0	4	5	0	2	3.31	2
Television	2	0	2	1	1	6	1.38	9
Tours	1	0	1	2	1	7	1.31	10

Table 18. Summary of Communication Forms Ranked by Farmers of Clinton, Highland and Warren Counties According to the Amount of Trust Placed in Conservation Information Received

	Number of Respondents/Degree of Trust							
Communication Forms	No Trust	Little Trust	Some Trust	Great Trust	No Opinion	No Response	Average Rating	Rank
Agency Personnel other than SCS/SWCD	2	5	6	5	8	15	1.77	13
Clinic Workshops	3	2	11	4	6	16	1.91	12
District Newsletter	1	1	15	13	5	8	3.14	3
Equipment Dealers	4	8	9	2	5	14	1.93	11
Fertilizer Dealers	4	4	11	4	5	14	2.07	8
Field Demonstrations	2	4	12	8	3	13	2.49	5
Magazines	3	6	13	2	2	16	2.05	9
Neighbors	2	5	10	6	3	15	2.14	7
Newspapers	4	8	16	5	2	7	2.86	4
Personal Contact w/SCS or SWCD Personnel	1	0	11	20	5	5	3.51	2
Public Meetings	1	4	12	6	6	13	2.28	6
Radio	4	6	13	5	4	10	2.49	5
SCS/SWCD Bulletin/ Flyer	1	0	18	15	4	4	3.56	1
Television	3	7	8	2	7	16	1.77	13
Tours	3	2	11	5	5	16	2.00	10

SCS And SWCD Annual and Special Activities as Sources of Conservation Information

Question 6 provided farmers with a list of five annual activities which were common to all three study counties. Farmers were asked to indicate which of the annual activities they had attended, and whether or not they considered the activities to be sources of conservation information.

The majority of Clinton County respondents indicated that they had not attended their district's annual activities. The dictrict packet was attended by only one respondent (5.9%). The annual meeting and the no-till tour were both attended by four respondents (23.5%). The no-till clinic was attended by three respondents (17.6%). The highest number of respondents, nine (52.9%), attended the district's county fair display.

The response to the question regarding annual activities as sources of conservation information was poor. For each of the annual activities less than 50% of the farmers surveyed responded to this question. Two respondents (11.8%) felt the district packet was a source of conservation information. Four respondents (23.5%) felt the annual meeting, the no-till tour, and the no-till clinic were each sources of conservation information. The county fair display was considered a source of conservation information by the largest number of respondents, eight (47.1%).

Ten Highland County farmers (76.9%) responded to the first portion of this question. The majority of the respondents (70%) indicated that they had not attended the annual meeting, the district packet, or the no-till clinic. In contrast, 60% of the respondents did attend Highland's no-till tour. The highest percentage of respondents (70%) indicated that they had attended the county fair display.

The number of persons responding to the question's second part varied from five to eight. Three persons indicated that they felt the district packet to be a source of conservation information. Four persons felt the annual meeting and the no-till clinic were both sources of conservation information. Five persons felt Highland's no-till tour was a source of conservation information. The county fair display was considered a source of conservation information by seven persons. One respondent indicated that he felt none of the annual activities were sources of conservation information.

The majority of Warren County respondents did not attend their district's annual activities. Only one respondent attended each of the following activities: district packet, no-till tour, and no-till clinic. Two respondents attended the annual meeting. The largest number of respondents (eight) attended the county fair display.

Less than half of the survey respondents indicated whether or not they felt annual activities were sources of conservation information. Two respondents felt the no-till clinic was a source of conservation information. Three respondents felt the annual meeting, the district packet, and the no-till tour were each sources of conservation information. The largest number of respondents (five) felt the county fair display was a source of conservation information.

Throughout the three study counties, the majority of respondents did not attend their district's annual activities. Only the county fair display attracted a large number of survey respondents.

Because the response to the second portion of this question was poor, it was difficult to determine how many of the annual activities are thought, by farmers, to be sources of conservation information. Only the county fair display was definitely considered to be a source of conservation information. In each county, 50% or more of the respondents indicated that the display was a source of conservation information.

Question 7 was based on a list of nine special activities which occurred in Clinton, Highland or Warren County. Respondents were asked to identify the activities which they attended, to indicate which activities they would like to see repeated in their county (if the activity was held in the respondent's county), and to indicate which activities they would like to see held in their county (if the activity was one held by a county other than their own).

The purpose of this question was to determine if residents of different counties had similar interests which might indicate that county SCS/SWCD offices should collaborate more closely when planning special activities. Furthermore, the researcher was also interested in determining if county SCS/SWCD offices were meeting the needs and interests of their farming communities.

The results of this question are presented in the following manner: the county which is the focus of discussion will have the farmers' responses to its own activities reviewed first. Following this review will be farmers' responses to the special activities which occurred in the two other study counties.

Two of the 17 possible Clinton County residents (11.8%) did not answer Question 7. In addition, three respondents (17.6%) indicated they did not attend any of the special activities. These respondents did not provide any additional comments or responses to Question 7.

One or more Clinton County respondents attended each of the three special activities which took place in Clinton County. Clinton County's Equipment Field Day, and its

No-Till Clinic were both attended by three respondents (17.6% each). The county's Woodland Field Day was attended by only one respondent (5.9%).

The percentage of respondents who indicate they would like to see the Clinton County activities repeated was higher than the percentage of respondents who attended the activities. Seven respondents (41.2%) indicated they would like to see the Equipment Field Day repeated. Six respondents (35.3%) expressed an interest in seeing the No-till Clinic repeated. Five respondents (29.4%) indicated they would like to see the Woodland Field Day repeated.

For the Equipment Field Day and the Woodland Field Day, two respondents (11.8%) requested that each activity be initiated in Clinton County. The researcher did not expect this response from Clinton County respondents because the two activities originated in Clinton County. However, the researcher attributed the responses to a misunderstanding of survey instructions which indicated that respondents should request programs be initiated in their county if the activity originated in a county other than the respondent's own county.

None of the respondents attended Highland County's Watershed Tour. Nor did any of the respondents indicate that the activity should be repeated or initiated in Clinton County.

One Clinton County respondent attended Highland County's Arbor Day Activities and indicated that he would like to see the activity repeated. He also indicated that a similar activity should be initiated in Clinton County. One other respondent also indicated that a similar activity should be held in Clinton County although he did not indicate that he had attended the Highland County Arbor Day activities.

Although none of the Clinton County respondents indicated that they attended Warren County's Animal Waste Management Field Day, one respondent indicated that he would like to see the activity repeated. Another respondent indicated a desire to see a similar activity initiated in Clinton County.

Similar to the Animal Waste Management Field Day, none of the Clinton County respondents attended Warren County's Animal Waste Clinic. However, the respondent who indicated that the Field Day should be repeated also indicated that the Clinic should be repeated. Similarly, the respondent who indicated that a field day should be held in Clinton County also indicated that a clinic should also be held in Clinton County. One other respondent also felt that an animal waste clinic should be held in Clinton County.

None of Clinton County's farmers attended Warren County's Pond Clinic. Nor did any of the farmers indicate that the activity should be repeated. However, one respondent did indicate a desire to see a similar clinic held in Clinton County.

One Clinton County respondent indicated that he did see Warren County's Field Test Plots. However, he gave no indication that he desired to see the activity repeated, or a similar activity initiated in Clinton County. However, three respondents did indicate a desire to see a similar activity initiated in Clinton County, although none of the respondents indicated that they had seen the Warren County test plots.

Similar to the Clinton County results, a percentage of the Highland County respondents either did not respond to the question, or only completed a portion of the question. Four of 13 respondents (30.8%) did not answer the question. Two respondents (15.4%) indicated they did not attend any of the special activities, but did not provide any further comments or complete the remainder of the matrix provided in Question 7.

Highland County SCS and SWCD sponsored two special activities during 1982, a watershed tour and Arbor Day activities. Four respondents (30.8%) attended the watershed tour. However, none of the respondents attended the Arbor Day activities.

Three respondents (23.1%) indicated they would like to see the watershed tour repeated. Two of the three respondents had attended the tour. One respondent (7.7%) indicated he would like to see the Arbor Day activities repeated.

For both activities, one respondent (7.7%) indicated he would like to see these programs initiated in Highland County. As with the Clinton County results, the researcher attributes this response to a misunderstanding of the question's instructions.

One Highland County respondent attended Clinton County's Equipment Field Day and indicated that the activity should be repeated, and that a similar activity should be initiated in Highland County. One other respondent also indicated that an equipment field day should be held in Highland County.

Although none of the Highland County respondents attended Clinton County's Woodland Field Day, two respondents indicated that a similar activity should be held in Highland County.

Three Highland County respondents attended Clinton County's No-till Clinic. One of the three respondents indicated that the clinic should be repeated and that a similar activity should be initiated in Highland County. One other respondent also indicated that a similar clinic should be held in Highland County although he did not attend Clinton County's clinic.

None of the Highland County farmers attended Warren County's Animal Waste Management Field Day, Animal Waste Clinic, or Pond Clinic. Furthermore, none of the respondents indicated that any of these activities should be repeated. Three respondents indicated that an activity similar to Warren County's Pond Clinic should be initiated in Highland County. However, none of the respondents indicated that programs similar to Warren County's two animal waste programs should be initiated in Highland County.

One Highland County respondent indicated that he did see Warren County's field test plots. The same respondent indicated that the activity should be repeated and that a similar activity should be initiated in Highland County. Two other respondents also indicated that an activity similar to Warren County's field test plots should be initiated in Highland County.

None of the Warren County respondents attended any of Warren County's activities (Animal Waste Management Field Day, Animal Waste Clinic, Pond Clinic, and Field Test Plots). However, one respondent (7.7%) indicated that the Animal Waste Management Field Day should be repeated. Two respondents (15.4%) indicated that the Animal Waste Clinic should be repeated. Four respondents (30.8%) indicated that the Pond Clinic should be repeated. Three respondents (23.1%) indicated that the Field Test Plots should be repeated. In addition, one respondent indicated that the Pond Clinic should be initiated in Warren County (probably a misunderstanding of the question's instructions).

None of the Warren County respondents attended Clinton County's Equipment Field Day or Woodland Field Day. However, one Warren County respondent did attend Clinton County's No-till Clinic.

Two respondents indicated that the Equipment Field Day should be repeated. Two respondents desired a repeat of the Woodland Field Day. Five Warren County respondents indicated that the No-till Clinic should be repeated. In addition, two Warren County respondents indicated that an activity similar to Clinton County's Equipment Field Day should be held in Warren County. One respondent indicated that an activity similar to the No-till Clinic should be held in Warren County.

One Warren County respondent attended Highland County's Watershed Tour. However, none of the respondents attended Highland County's Arbor Day Activities.

Three respondents indicated that the watershed tour should be repeated, although they did not attend the tour. Two of these three respondents also indicated that an activity similar to the watershed tour should be initiated in Warren County. One respondent indicated that the Arbor Day activities should be repeated. However, none of the

Warren County respondents indicated that a similar activity should occur in Warren County.

An analysis of the 34 responses to the survey question on special activities revealed Clinton County's No-till Clinic and Equipment Field Day, and Highland County's Watershed Tour were the most attended special activities. Seven persons (20.6%) attended Clinton's No-till Clinic. Five persons (14.7%) attended Highland's Watershed Tour. Four persons (11.8%) attended Clinton County's Equipment Field Day.

The three activities which respondents most frequently indicated should be repeated were Clinton County's No-till Clinic, Equipment Field Day, and Woodland Field Day. Twelve respondents (35.3%) indicated the No-till Clinic should be repeated. Ten respondents (29.4%) indicated the Equipment Field Day should be repeated. Seven respondents (20.6%) indicated the Woodland Field Day should be repeated.

The Warren County Field Test Plots and Pond Clinic, and Clinton County's Equipment Field Day were the activities which respondents most frequently indicated they would like to see in their own counties. Six respondents (17.3%) chose Warren County's Test Plots. Four respondents (11.8%) chose Warren County's Pond Clinic. Four respondents (11.8%) chose Clinton County's Equipment Field Day.

Section III. Conservation Through Mass Media

Section III was devoted to the use of mass media to convey conservation information. This section was subdivided into four parts (one for each medium). Each part consisted of four questions, three questions which were basically the same regardless of the medium in question, and one question which varied according to the medium.

Three of the questions asked respondents if they received conservation information from a specific form of mass media, to identify the source of their conservation information (either by call letters or by name), and to indicate how they felt about the amount of time devoted by the medium to the coverage of conservation information. These questions appeared in each of the subdivisions. A fourth question varied according to the medium in question. For radio and television, respondents were asked to indicate the times during the day at which they heard conservation information. For newspapers, respondents were asked to indicate from what part of the paper they received their conservation information. For magazines, respondents were asked to identify those periodicals (farm and/or conservation based) which they received regularly.

Radio

In Clinton County, 13 of 17 respondents (76.5%) indicated they received conservation information through radio. Eight of the 13 respondents (61.5%) listed WKFI (Wilmington), two (15.4%) listed WLW (Cincinnati), one (7.7%) listed WSWO (Wilmington), and one (7.7%) listed WCHO (Washington Court House) as the radio stations from which conservation information was received.

Although Clinton County farmers indicated they heard conservation information at various times throughout the day, the majority of survey respondents indicated that they heard conservation information during two particular times of the day. Eight of 14 respondents (51.1%) indicated they heard conservation information on radio between the hours of 5 AM and 7 AM. Ten of 14 respondents (71.4%) heard conservation information on radio between the hours of 11 AM and 1 PM.

Clinton County respondents indicated they felt radio coverage of conservation information was either adequate or should be more. Six of 17 respondents (35.3%) felt there should be more radio coverage of conservation information. However, nine of 17 respondents (52.9%) indicated that radio coverage of conservation information was adequate.

In Highland County, nine of 13 respondents (69.2%) indicated they received conservation information through radio. Three respondents (23.1%) indicated they did not receive conservation information through radio. One survey respondent did not answer the questions regarding radio.

The nine respondents who indicated they heard conservation information on radio identified WSRW (Hillsboro) as the radio station through which they received conservation information. In addition, one respondent identified WKFI (Wilmington) as a radio station through which he received conservation information.

Ten farmers responded to the survey question regarding times of day at which they heard conservation information broadcast by radio stations. Similar to Clinton County respondents, the majority of Highland County respondents indicated the hours from 5 AM to 7 AM, and 11 AM to 1 PM were the times of the day when they heard conservation information. Eighty per cent of the respondents chose the hours of 5 AM to 7 AM. In addition, 50% of the respondents chose the hours from 11 AM to 1 PM.

Twelve of 13 respondents (92.3%) indicated they felt radio time devoted to conservation information was either adequate or should be more. Three respondents (23.7%) indicated that coverage of conservation by radio should be more. Nine respondents (69.2%) indicated that radio time devoted to conservation information was adequate.

Warren County respondents were almost equally divided into respondents who did receive conservation information through radio (41.7%) and those respondents who did not receive conservation information through radio (50%). One respondent (8.3%) indicated that he was not sure if he received conservation information through radio.

Sixty per cent of the respondents who indicated they received conservation information through radio, identified WLW (Cincinnati) as the station through which they received their conservation information. Forty per cent of the respondents identified WRFD (Worthington) as the radio station through which they received their conservation information. WKFI (Wilmington) was also listed as a radio station by one respondent.

Similar to Clinton and Highland County respondents, Warren county respondents indicated they heard conservation information during the hours of 5 AM and 7 AM and 11 AM and 1 PM.

Six respondents gave the following opinions regarding radio time devoted to conservation information. Four respondents indicated the amount of radio time devoted to conservation information was adequate. One respondent indicated that less radio time should be devoted to conservation information. One respondent indicated more radio time should be devoted to the coverage of conservation information.

Overall, 27 of 43 respondents (62.8%) indicated that they received conservation information through radio. Thirteen respondents (30.2%) indicated that they did not receive conservation information through radio. Three respondents (7.0%) either did not answer the questions on radio, or indicated they were unsure whether or not they received conservation information through radio.

Respondents listed WFKI (Wilmington), WLW (Cincinnati), WCHO (Washington Court House), WSRW (Hillsboro), WRFD (Worthington), and WSWO (Wilmington) as the radio stations through which they received conservation information.

Although survey results indicated that farmers may be receiving conservation information through radio throughout the day, the hours of 5 AM to 7 AM and 11 AM to 1 PM were selected most frequently by survey respondents. Twenty respondents checked the hours of 5 AM to 7 AM (46.5%). Nineteen respondents (44.2%) checked the hours of 11 AM to 1 PM.

Ten of 43 respondents (23.3%) indicated that more radio time should be devoted to the coverage of conservation information. Twenty-two respondents (51.2%) indicated that radio time devoted to the coverage of conservation information was adequate. One respondent (2.3%) indicated that radio time devoted to the coverage of conservation information should be less. Ten respondents (23.3%) did not indicate their opinions regarding the amount of radio time devoted to conservation information

Television

Four of the 17 Clinton County respondents (23.5%) indicated that they received conservation information through television. Although 13 respondents (76.5%) indicated they did not receive conservation information through television, seven of those respondents answered the remaining three questions regarding television.

Respondents identified WHIO (Dayton) WLWT (Cincinnati) and WKRC (Cincinnati) as the television stations from which they received conservation information.

Six respondents (35.3%) indicated the times of the day during which they received conservation information. Three respondents checked 5 AM to 7 AM. Two respondents checked 11 AM to 1 PM and 7 PM to 9 PM. One respondent checked the hours of 5 PM to 7 PM. In addition, one respondent wrote in the hour from 7 AM to 8 AM, while another respondent specified 5 AM to 7 AM on Saturdays.

Eleven respondents gave their opinions regarding the amount of television time devoted to conservation information. Nine of the 11 respondents (81.8%) indicated that more television time should be devoted to conservation information. One respondent indicated the television time devoted to conservation information should be less.

In Highland County, three respondents (23.1%) indicated that they receive conservation information through television. Nine respondents (69.2%) indicated they did not receive conservation information through television. One respondent (7.7%) did not answer any of the questions regarding television.

WKRC, in Cincinnati, was identified by two respondents as the television station from which they received conservation information. One respondent identified WBNS, in Columbus, as the television station from which he received conservation information. However, the respondent specified that he only received conservation information from this television station at noon.

Respondents listed the hours of 5 AM to 7 AM,11 AM to 1 PM, and 5 PM to 7 PM as the hours of the day during which they received conservation information. One respondent checked 5 AM to 7 AM, two respondents checked 11 AM to 1 PM, and one respondent checked 5 PM to 7 PM.

Regarding television coverage of conservation information, two respondents indicated that television coverage was adequate. One respondent indicated that television coverage of conservation information should be more.

In Warren County, 11 respondents (84.6%) indicated they did not receive conservation information through television. One farmer did not respond to this series of questions, and one farmer was not sure if he received conservation information through television.

Only one respondent checked a particular time of day at which he received conservation information through television. The respondent checked 5 AM to 7 AM.

Five farmers responded to the question regarding television time devoted to conservation information. Three indicated that more television time should be devoted to conservation information. One respondent indicated that television time devoted to conservation information was adequate.

Seven of 43 respondents (16.3%) indicated they received conservation information through television. Thirty-three respondents (76.7%) indicated they did not receive conservation information through television. Two respondents (4.7%) did not answer this question. One respondent (2.3%) was not sure if he received conservation information through television.

Respondents identified WHIO (Dayton), WLWT (Cincinnati), WKRC (Cincinnati), and WBNS (Columbus) as the television stations from which they received conservation information.

Only 10 of 43 respondents (23.3%) indicated any particular time of day at which they received conservation information through television. The most frequently checked hours were 5 to 7 AM (11.6%) and 11 AM to 1 PM (9.3%). The hours

5 PM to 7 PM and 7 PM to 9 PM were each checked by two respondents (4.6%). One respondent (2.3%) listed the hour 7 AM to 8 AM, and one respondent specified 5 AM to 7 AM on Saturdays.

Thirteen of 43 respondents (30.2%) indicated that more television time should be devoted to the coverage of conservation information. Five respondents (11.6%) indicated that television time devoted to the coverage of conservation information was adequate. One respondent (2.3%) indicated that less television time should be devoted to conservation information.

Newspapers

Thirteen of 17 (76.5%) Clinton County respondents indicated that they received conservation information through newspapers. Two respondents (11.7%) indicated they did not receive conservation information through newspapers. Two persons did not respond to any of the questions regarding newspapers.

Twelve of 13 (92.3%) respondents indicated they received their conservation information through the Wilmington News Journal, a daily publication from Wilmington, Ohio.

Only one respondent (5.9%) identified another paper other than the Wilmington News Journal. This respondent identified the Record Herald, from Washington Court House, Ohio as the newspaper from which he receives conservation information.

Twelve of 13 respondents (92.3%) indicated they received their conservation information through the newspaper's district conservation column. In addition, six respondents (46.2%) also checked articles/stories about district activities as a newspaper source from which they received conservation information. One respondent (7.7%) indicated articles/stories about district activities was the newspaper source of his conservation information.

Fifteen farmers volunteered their opinions regarding the amount of newspaper coverage devoted to conservation information. Seven respondents (46.7%) indicated that newspaper coverage devoted to conservation information should be more. Eight respondents (53.3%) indicated that newspaper coverage devoted to conservation information was adequate.

In Highland County, 12 of 13 respondents (92.3%) indicated that they received conservation information through newspapers. Ten of 12 respondents (83.3%) identified the Hillsboro Press Gazette as the newspaper through which they received conservation information. One respondent identified the Greenfield Times as the newspaper through which he received conservation information. One respondent did not identify a newspaper.

The majority of Highland County respondents (66.7%) indicated they read conservation information in newspaper articles/stories about district activities. Two respondents

(16.7%) indicated they read about conservation in the district news column. One respondent indicated reading about conservation information in both the district news column and in newspaper stories/articles about district activities. One respondent did not indicate where in the newspaper he read about conservation.

The majority of Highland County respondents (91.7%) indicated that newspaper coverage of conservation information was either adequate, or should be more. Five respondents (41.7%) indicated that newspaper coverage of conservation should be more. Six respondents (50%) indicated that newspaper coverage of conservation information was adequate. One respondent did not give an opinion about newspaper coverage.

The majority of Warren County respondents (61.5%) indicated they received conservation information through newspapers. Four respondents (30.8%) indicated they did not receive conservation information through newspapers. One farmer did not respond to this series of questions.

Warren County respondents identified seven newspapers as sources of conservation information. However, the majority (53.9%) of the respondents identified the Western Star, published in Lebanon, Ohio as one of the newspapers from which they receive conservation information.

Five respondents (38.5%) identified newspaper articles/ stories about district activities as the portion of the newspaper from which they received conservation information. Three respondents (23.1%) indicated they read conservation information in both the district news column and in articles and stories about district activities. Two respondents (15.4%) indicated they read conservation information in the district conservation column. Three persons did not answer this question.

Ten respondents (76.9%) gave their opinions regarding the amount of newspaper coverage devoted to conservation information. Five persons indicated that the amount of conservation information available through newspapers was adequate. Five persons indicated that more conservation information should be available through newspapers.

Overall, 33 of 43 respondents (76.7%) indicated that they received conservation information through newspapers. Seven respondents (16.3%) indicated that they did not receive conservation information through newspapers. Three persons (7.0%) did not respond to the question.

Eleven newspapers were identified by respondents as sources of conservation information. However, the local newspaper for each county was the newspaper most frequently identified by respondents. The three local newspapers most frequently identified were the Wilmington News Herald

(Clinton County), the Hillsboro Press Gazette (Highland County), and the Western Star (Warren County).

Sixteen respondents (37.2%) checked the district conservation column as the portion of the newspaper from which they read conservation information. Fourteen respondents (32.6%) indicated that they read conservation information in the articles/stories about district activities which appear in the newspaper. Ten respondents (23.3%) indicated that both the district conservation column and stories/articles about district activities were sources of conservation information within the newspaper. One respondent did not identify a source of conservation information within the newspaper. Two respondents did not answer this question.

Thirty-six farmers (83.7%) gave their opinions regarding newspaper coverage devoted to conservation information. Nineteen respondents (44.2%) indicated that the amount of newspaper coverage devoted to conservation was adequate. Seventeen respondents (39.5%) indicated that newspaper coverage devoted to conservation information should be more. Seven persons (16.4%) did not answer the question.

Magazines

Eleven of 17 Clinton County respondents (64.7%) indicated that they received conservation information through magazines. Four respondents (23.5%) indicated they did not receive conservation information through magazines. Two respondents (11.8%) did not answer the series of questions regarding magazines.

Clinton County respondents identified seven magazines as sources of conservation information. The most frequently identified magazine was Ohio Farmer (eight respondents). This magazine was followed by Farm Journal (five respondents), Buckeye Farm News, Farm Bureau, Ohio Successful Farmer, and Successful Farming (two respondents each), and New Farm (one respondent).

Twelve of 17 respondents (70.6%) gave their opinions regarding the amount of magazine coverage devoted to conservation information. Four respondents (33.3%) indicated that magazine coverage of conservation information should be more. Eight respondents (66.6%) indicated that magazine coverage of conservation information was adequate.

In Highland County, nine of 13 respondents (69.2%) indicated they received information through magazines. Four respondents (30.8%) indicated they did not receive conservation information through magazines.

Highland County farmers identified six magazines as sources of conservation information. The most frequently identified magazine was Ohio Farmer (seven respondents). Following Ohio Farmer were Farm Journal (four respondents), Successful Farming (three respondents), and Buckeye Farm News, Pro Farmer, and Soybean Digest (one respondent each).

Ten of 13 respondents (76.9%) volunteered opinions regarding the amount of magazine coverage devoted to conservation information. Two respondents (20.0%) indicated the amount of conservation information available through magazines should be more. Eight respondents (80.0%) indicated that the amount of conservation information available through magazines was adequate.

Eleven of 13 Warren County respondents (84.6%) indicated they received conservation information through magazines. Two respondents (15.4%) indicated they did not receive conservation information through magazines. One person did not respond to this series of questions.

Four magazines were identified by Warren County respondents as sources of conservation information. The most frequently identified magazine was Ohio Farmer (nine respondents). Following Ohio Farmer were Farm Journal and Successful Farming (three respondents each), and Successful Farmer (two respondents).

Ten of 13 respondents from Warren County gave their opinions regarding magazine coverage of conservation information. Eight respondents (61.5%) indicated that magazine coverage of conservation information was adequate. Three respondents (23.1%) indicated that more conservation information should be covered by magazines. Two respondents gave no opinion about the amount of conservation information covered by magazines.

Overall, 31 respondents (72.1%) indicated they received conservation information through magazines. Ten respondents (23.3%) indicated they did not receive conservation information through magazines. Three persons (7.0%) did not answer this question.

Respondents identified nine magazines as sources of conservation information. The three most frequently identified magazines were Ohio Farmer (identified 24 times), Farm Journal (identified 12 times), and Successful Farmer (identified eight times). Other periodicals identified by farmers as sources of conservation information were Buckeye Farm News, Farm Bureau, New Farm, Ohio Successful Farmer, Pro Farmer, and Soybean Digest.

Nine of 43 respondents (20.9%) indicated that more conservation information should be covered through magazines. Twenty-four respondents (55.8%) indicated that the amount of conservation information covered in magazines was adequate. Ten persons (23.3%) did not respond to the question.

Section IV: Contact with SCS/SWCD Personnel

Section IV contained questions related to respondents' contacts with SCS and SWCD personnel. The first question asked respondents about the frequency of their contacts with

SCS and/or SWCD personnel. The second question asked respondents to indicate whether or not they were district cooperators.

In Clinton County, the majority of respondents (58.8%) indicated they had personal contact with SCS and/or SWCD personnel either every three to four months, or once each year. Five respondents (29.4%) indicated they had contact with SCS and/or SWCD personnel every three to four months. Five respondents (29.4%) indicated they had personal contact with SCS and/or SWCD personnel once each year. Two respondents (11.8%) indicated they never had personal contact with SCS and/or SWCD personnel. Two respondents (11.8%) indicated they had personal contact with SCS and/or SWCD personnel every six to eight months. One respondent (5.9%) indicated he had personal contact with SCS and/or SWCD personnel every two to three years.

More than half (52.9%) of the Clinton County respondents indicated they were not district cooperators. Six respondents (35.3%) indicated they were district cooperators. Two persons (11.8%) did not answer this question.

Eleven of 13 Highland County respondents (84.6%) answered the question regarding frequency of personal contact with SCS and/or SWCD personnel. Four respondents (30.8%) indicated having personal contact with SCS and/or

SWCD personnel every six to eight months. Three respondents (23.1%) indicated having personal contact with SCS and/or SWCD personnel once each year. Two respondents (15.4%) indicated having personal contact with SCS and/or SWCD personnel every three to four months. One respondent (7.7%) indicated he had personal contact with SCS and/or SWCD personnel every two to three years. One respondent indicated he never had personal contact with SCS and/or SWCD personnel.

Six Highland County respondents (46.2%) indicated they were district cooperators. Seven of Highland County's 13 respondents (53.9%) indicated they were not district cooperators.

Four Warren County farmers (30.8%) indicated they never had personal contact with SCS and/or SWCD personnel. Three respondents (23.1%) indicated they had personal contact with SCS and/or SWCD personnel every three to four months. Three respondents (23.1%) indicated they had personal contact with SCS and/or SWCD personnel once each year. One respondent (7.7%) indicated having personal contact with SCS and/or SWCD personnel every two to three years.

Seven of Warren County's 13 respondents (53.3%) indicated they were not district cooperators. Five of 13 respondents (38.5%) indicated they were district cooperators.

Frequency of personal contact with SCS and/or SWCD personnel varied among the three study counties. The most frequently chosen period between personal contacts was one year. Eleven of 43 respondents (25.6%) indicated they had personal contact with SCS and/or SWCD personnel once each year. Ten respondents (23.2%) indicated making personal contact every three to four months. Eight respondents (18.6%) indicated making personal contact every six to eight months. Seven respondents (16.3%) indicated never making personal contact with SCS and/or SWCD personnel. Four persons (9.3%) indicated they made personal contact with SCS and/or SWCD personnel whenever it was necessary, such as for a special project. Three persons (7.0%) indicated they made personal contact with SCS and/or SWCD personnel every two to three years.

Seventeen of 43 respondents (39.5%) indicated they were district cooperators. Twenty-three respondents (53.5%) indicated they were not district cooperators. Three persons (7.0%) did not respond to this question.

Section V: Conservation Topics for Future Programs

Section V provided respondents with the opportunity to address points and/or considerations which may not have been covered in the survey. The researcher was particularly interested in future topics of interest. The suggestions made by respondents would be included in the recommendations to the SCS/SWCD offices.

Respondents from Clinton and Highland Counties indicated they were interested in more information regarding no-till, animal waste management, erosion, and pond management, for future SCS/SWCD programs. Warren County respondents did not suggest any future topics of interest.

Part II. Survey Results from SCS and SWCD Personnel

Survey Response

In Clinton County, three staff members (of a possible four) completed and returned the study survey for a total response of 75%. In Highland County, all four staff members completed and returned the study survey for a total response of 100%. In Warren County, all three staff members completed and returned the study survey for a total response of 100%.

The researcher distributed a total of 11 surveys to be completed and returned by the staff members of Clinton, Highland, and Warren Counties' SCS and SWCD. Ten of 11 survey recipients completed and returned the survey, thereby equalling a 90.9% total return (Table 19, p. 120).

Table 19. Summary of Agency Survey Response

County	Number of Surveys Distributed	Number of Surveys Returned	Percent Return
Clinton	4	3	75%
Highland	4	4	100%
Warren	3	3	100%
Total	11	10	90.9%

Section I. General Communication Program

A series of five questions appeared in this section. They were designed to evaluate the overall communication program of each county surveyed, based on personal and professional judgements. The first four questions were based on 11 forms of communication commonly used by SCS and SWCD offices as part of their farmer education programs. Survey respondents were asked to identify those forms of communication used by their district to convey conservation information to farmers, to rate each form individually in terms of its effectiveness at conveying conservation information to farmers, to rank them relative to each other in terms of personal preference for using each form of communication to convey conservation information, and to rank them relative to each other in terms of their effectiveness at conveying conservation information.

Question 1: Please check those forms of communication used by your district to convey conservation information to farmers in your district.

Eleven forms of communication were listed as possible responses to this question. Of those 11, personal contact, newsletters, newspapers, radio, field demonstrations, tours, and public meetings were checked by all district personnel as modes of communication used by the Clinton County SCS and SWCD office to convey conservation information to farmers. In addition, two respondents indicated the use of clinics, and one respondent indicated the use of bulletin/flyers to convey conservation information. None of the respondents indicated television or magazines as modes of communication used by the district.

In Highland County, all four respondents from the SCS and SWCD office checked personal contact, newsletters, newspapers, radio, tours, and public meetings as modes of communication which were used by the district to convey conservation information to farmers. In addition, one respondent checked bulletins/flyers, field demonstrations, and clinics as communication modes used by the Highland County SCS and SWCD office. Under "other" one respondent wrote in school presentations for kids as a mode of communication.

For Warren County, all three respondents from the SCS and SWCD office checked personal contact, bulletins/flyers, newsletters, newspapers, field demonstrations, and clinics as communication forms used by their district to convey conservation information to farmers. In addition, one respondent checked tours, and two respondents checked public meetings as communication forms used by the Warren County SCS and SWCD office.

Summary

Personal contact, newsletters and newspapers were the communication forms most frequently named as modes of communication used by the three SCS and SWCD offices surveyed by the researcher. For each form, 100% of the potential respondents indicated their office used this mode to communication conservation information to farmers.

Following these three forms, 90% of the respondents named tours and public meetings, 70% named radio and field demonstrations, 60% named clinics, and 50% named bulletins/flyers. None of the respondents identified television or magazines as communication forms used to convey conservation information (Table 20, p. 123).

Table 20. Summary of Communication Forms Used by the SCS and SWCD

Communication Form	Number of Respondents Identified By	Percent of Total Respondents
Personal Contact	10	100
Newsletters	10	100
Newspapers	10	100
Tours	9	90
Public Meetings	9	90
Radio	7	70
Field Demonstrations	7	70
Clinics	6	60
Bulletins/Flyers	5	50
Television	0	0
Magazines	0	0

Question 2: Please rate the following forms of communication in terms of its effectiveness in conveying conservation information to the farmers in your district (1 = not effective, 2 = somewhat effective, 3 = effective, 4 = very effective).

The question intended that respondents rate all 11 forms of communication individually regardless of how many forms were used by the district. However, each of the respondents rated only those forms of communication which they indicated using in Question 1.

The researcher assigned a numeric value to each degree of effectiveness: four points for "very effective", three points for "effective", two points for "somewhat effective", and one point for "not effective". For each degree of effectiveness, the researcher multiplied the total number of responses by the corresponding numeric value. These values were then averaged in order to rate the communication forms on a scale of one to four.

Among the Clinton County respondents, personal contact ranked highest in effectiveness with an average value of four. This was followed by tours and clinics, both with an average value of 3.66, field demonstrations and newsletters, both with an average value of 3.33, and radio with an average value of 3.0. The category of bulletins/flyers was not considered in these calculations because only one of three respondents rated its effectiveness. Furthermore, television and magazines were not rated by any of the respondents.

Among Highland County's SCS and SWCD personnel, personal contact ranked highest in effectiveness with an average value of four. This was followed by tours with an average value of 3.75, newsletters, radio, and public meetings with an average value of 2.75, and newspapers with an average value of 2.5. Only two respondents rated the effectiveness of bulletins/ flyers and clinics. Both forms of communication had average values of 1.25 (based on four potential respondents). Averages were not calculated for field demonstrations and magazines because only one respondent rated their effectiveness. In addition, none of the respondents rated television.

Among Warren County's SCS and SWCD personnel, personal contact was rated the most effective with an average value of four. Personal contact was followed by field demonstrations, newsletters, tours and clinics, all with an average value of three, and bulletins/flyers and newspapers with an average value of 2.67. Only two respondents rated the effectiveness of public meetings, which received an average rating of 1.67 (based on three potential respondents). Averages for radio and magazines were not calculated because only one respondent rated the effectiveness of these forms. In addition, television was not rated by any of the Warren County SCS and SWCD personnel.

Summary

According to the responses givey by Clinton, Highland and Warren Counties' SCS and SWCD personnel, the five most effective forms of communication for conveying conservation information to farmers were personal contact, tours, newsletters, newspapers and public meetings. On a scale of one to four (1 = not effective, 4 = very effective), these communication forms received average ratings of 4.0, 3.5, 3.0, 2.8 and 2.7, respectively (Table 21, p. 127).

Following these five forms were radio and field demonstrations (with average ratings of 2.2), clinics (1.8), bulletins/flyers (1.6), magazines (0.5) and television (0.0) (Table 21, p. 127).

Question 3: Please rank the following forms of communication according to your personal preference for using them to convey conservation information (1 = first choice, 11 = last choice).

In order to establish a ranking (of communication modes) applicable to the district, as a whole, the numeric values listed by each respondent for each communication mode was averaged.

For Clinton County, the averages indicated that personal contact was the first choice among the SCS and SWCD personnel when trying to convey conservation information. This mode of communication was followed by field demonstrations and public meetings (average value of 4.33), tours and clinics (5.33),

Table 21. Summary of Effectiveness of Communication Forms Rated by SCS and SWCD Personnel of Clinton, Highland and Warren Counties

	Number of Respondents/Degree of Effectiveness						
Communication Form	No Effective	Somewhat Effective	Effective	Very Effective	No Response	Average Rating	Rank
Personal Contact	0	0	0	10	0	4.0	1
Tours	0	0	6	4	0	3.5	2
Newsletters	0	1	8	1	0	3.0	3
Newspapers	0	4	4	2	0	2.8	4
Public Meetings	0	3	3	3	1	2.7	5
Radio	0	3	4	1	2	2.2	6
Field Demonstrations	0	0	6	1	3	2.2	6
Clinics	0	2	3	1	4	1.8	7
Bulletins/Flyers	0	2	4	0	4	1.6	8
Magazines	0	2	0	0	8	0.5	9
Television	0	0	0	0	10	0.0	--

newsletters and newspapers (5.66), radio (6.0), and bulletins/flyers (7.66). Television and magazines were exempted from these calculations because they were rated by only one of the three respondents.

SCS and SWCD personnel for Highland County indicated that personal contact was their first choice for conveying conservation information. Personal contact was followed by tours (average value of 3.75), field demonstrations (4.0), newsletters (5.0), public meetings (5.25), newspapers and radio (6.0), clinics (6.75), television (8.75), and magazines (10.75).

Averages calculated from the responses for Warren County indicated that personal contact was the first choice of the SCS and SWCD personnel when conveying conservation information to farmers. Personal contact was followed by newsletters (average value of 2.3), newspapers (2.6), bulletins/flyers and public meetings (3.0), field demonstrations and clinics (5.3), radio (5.7), television and tours (6.3) and magazines (7.0).

Summary

Among the SCS and SWCD personnel of Clinton, Highland and Warren Counties, personal contact is the first preference for conveying conservation information to farmers. All 10 respondents indicated that personal contact was their first choice (based on personal preference) of communication.

Personal contact was followed by public meetings (with an average rating of 4.3), newsletters (4.4), field demonstrations (4.5), newspapers (4.9), tours (5.0), clinics (5.9), television (6.5), bulletins/flyers (7.3), and magazines (7.5) (Table 22, p. 130).

Question 4: Please rank the following forms of communication in order of effectiveness at conveying conservation information (1 = most effective 11 = least effective).

Respondents were asked to rank the 11 forms of communication relative to each other based on their professional judgement. This question differs from Question 2 for which respondents ranked communication forms unto themselves, and Question 3 for which respondents ranked each communication form based on personal preference.

In order to establish a ranking (of the communication modes) applicable to the district, as a whole, the numeric values listed by each respondent for each communication mode were averaged.

Only two of Clinton County's SCS and SWCD personnel responded to this question. Based on their responses, personal contact was named as the most effective form of communication, with an average ranking of one. Personal contact was followed by radio (average ranking of 4.5), newspapers and field demonstrations (5.0), newsletters, tours and public meetings (5.5), clinics (6.0), and bulletins/flyers (7.5).

Table 22. Effectiveness of Communication Forms as Ranked by SCS and SWCD Personnel of Clinton, Highland and Warren Counties Based on Personal Preference

Communication Form	Average Rating	Rank
Personal Contact	1.0	1
Public Meetings	4.3	2
Newsletters	4.4	3
Field Demonstrations	4.5	4
Newspapers	4.9	5
Tours	5.0	6
Clinics	5.9	7
Television	6.5	8
Bulletins/Flyers	7.3	9
Magazines	7.5	10

Average ratings were not calculated for television and magazines because only one of Clinton County's SCS and SWCD personnel rated these two forms of communication.

The average rankings from Highland County's SCS and SWCD personnel indicated that personal contact is the most effective mode of communication at conveying conservation information. Personal contact was followed by tours (average rank of 3.75), newsletters (4.25), field demonstrations (4.5), public meetings (5.75), newspapers (6.0), radio (6.25), clinics (6.75), bulletins/flyers (7.75), television (9.5), and magazines (10.5).

The average rankings from Warren County's SCS and SWCD personnel indicate that personal contact is the most effective mode of communication for conveying conservation information to farmers. Personal contact was followed by newsletters (average ranking of 2.3), newspapers (2.6), clinics (4.6), field demonstrations (5.0), public meetings (5.3), bulletins/flyers and radio (6.0), tours (6.3), television (6.6), and magazines (7.3).

Summary

Throughout the three study counties, SCS and SWCD personnel considered personal contact to be the most effective means of communicating conservation information to farmers. Following personal contact were newsletters (average rating of 3.5), newspapers (4.2), field demonstrations (4.3), tours (4.5), public meetings (5.0), radio (5.2), clinics (5.3), bulletins/flyers (6.4), television (6.7), and magazines (7.5) (Table 23, p. 133).

Question 5: For each of the following forms of communication check the range which indicates, most closely, the frequency of occurrence within your district.

Question 5 consisted of a series of six individual questions designed to determine how often six of the 11 communication forms were used within each district surveyed. The survey question asked SCS and SWCD personnel to indicate how often during one year they used bulletins/flyers, field demonstrations, tours, clinics, and public meetings. An additional question asked survey respondents how many personal contacts per staff member were made per week.

Personal Contacts Per Staff Member Per Week

Clinton County's SCS and SWCD personnel indicated that 5 to 10 personal contacts were being made by each staff member each week. SCS and SWCD personnel in Highland County and Warren Counties also indicated that each of their staff members were making 5 to 10 personal contacts per week.

Bulletins/Flyers Per Year

Responses by Clinton County district personnel were divided between the ranges of 0 to 5 per year, and 5 to 10

Table 23. Effectiveness of Communication Forms as Ranked by SCS and SWCD Personnel of Clinton, Highland and Warren Counties Based on Professional Judgement

Communication Form	Average Rating	Rank
Personal Contact	1.0	1
Newsletters	3.5	2
Newspapers	4.2	3
Field Demonstrations	4.3	4
Tours	4.5	5
Public Meetings	5.0	6
Radio	5.2	7
Clinics	5.3	8
Bulletins/Flyers	6.4	9
Television	6.7	10
Magazines	7.5	11

per year. Two respondents indicated the former range, and one respondent indicated the latter range (Table 24, p. 134).

All four members of the Highland County SCS and SWCD staff indicated the use of bulletins/flyers to be in the range of 0 to 5 times per year (Table 24, p. 134).

Table 24: Number of Bulletins/Flyers Used by Clinton, Highland and Warren Counties Per Year

Frequency	No. of Respondents/County			Total No. Respondents	% of Total
	Clinton	Highland	Warren		
0 to 5	2	4	0	6	60
5 to 10	1	0	2	3	30
10 to 15	0	0	1	1	10

Two members of the Warren County SCS and SWCD staff indicated the frequency of bulletins/flyers to be in the range of 5 to 10 times per year. One member of the staff indicated the frequency of bulletins/flyers to be in the range of 10 to 15 times per year (Table 24, p. 134).

Field Demonstrations Per Year

Similar to the results for bulletins/flyers, the responses from Clinton County were divided into two ranges. Two respondents indicated a frequency of 0 to 2 field demonstrations per year. One respondent indicated a frequency of 2 to 4 field demonstrations per year (Table 25, p. 135).

Three of Highland County's SCS and SWCD staff members indicated that field demonstrations occurred in Highland County 0 to 2 times each year. One respondent indicated the frequency of field demonstrations to be 2 to 4 times per year (Table 25, p. 135).

Table 25. Number of Field Demonstrations Held in Clinton, Highland and Warren Counties Per Year

Frequency	No. of Respondents/County Clinton	Highland	Warren	Total No. of Respondents	Percent of Total
0 to 5	2	3	0	5	50
2 to 4	1	1	2	4	40
4 to 6	0	0	1	1	10

Two members of the Warren County SCS and SWCD staff indicated the occurrence of 2 to 4 field demonstrations per year. One member indicated an occurrence of 4 to 6 field demonstrations per year (Table 25, p. 135).

Tours Per Year

Each of the Clinton County respondents indicated the frequency of tours to be in the range of 0 to 2 per year. This range seems to coincide with Clinton County's annual report which indicated one tour for 1982, a conservation tour attended by 60 persons (Table 26, p. 136).

Three respondents from Highland County's SCS and SWCD office indicated the frequency of tours to be 2 to 4 times per year. One respondent indicated that the frequency of tours to be 0 to 2 times per year. This lower range seems to coincide with Highland County's annual report which indicated one tour during 1982, the No-till tour, attended by approximate 100 persons (Table 26, p. 136).

Table 26. Number of Tours Held by Clinton, Highland, and Warren Counties Per Year

Frequency	No. of Respondents/County			Total No. of Respondents	Percent of Total
	Clinton	Highland	Warren		
0 to 2	3	1	1	5	50
2 to 4	0	3	2	5	50

One member of the Warren County SCS and SWCD staff indicated that 0 to 2 tours occurred in Warren County each year. Two staff members indicated an occurrence of 2 to 4 tours per year. The district's annual report lists two tours for 1982 (Table 26, p. 136).

Clinics Per Year

Among Clinton County's SCS and SWCD personnel, two indicated the frequency of clinics to be in the range of 2 to 4 per year. One respondent indicated the frequency of clinics to be in the range of 2 to 4 per year. The lower range of 0 to 2 clinics coincides with the activities list compiled for the Clinton County 1982 annual report, which indicated a No-till clinic attended by 60 persons (Table 27, p. 137).

Three staff members of Highland County's SCS and SWCD office indicated the frequency of clinics to be in the range of 0 to 2 per year. One staff member indicated a frequency of 2 to 4 clinics per year. The lower range of 0 to 2 clinics per year coincides with the district's annual report which listed one clinic for 1982, a No-till workshop (Table 27, p. 137).

Table 27. Number of Clinics Held by Clinton, Highland and Warren Counties Per Year

Frequency	No. of Respondents/County			Total No. of Respondents	Percent of Total
	Clinton	Highland	Warren		
0 to 4	2	3	0	5	50
2 to 4	1	1	2	4	40
4 to 6	0	0	1	1	10

Two staff members of Warren County's SCS and SWCD office indicated the frequency of clinics to be in the range of 2 to 4 per year. One staff member indicated a frequency of 4 to 6 clinics per year. The district's annual report lists two clinics for 1982, an animal waste clinic held in August, 1982, and a no-till clinic held in February, 1982 which had 54 persons in attendance (Table 27, p. 137).

Public Meetings Per Year

In Clinton County, one SCS and SWCD person indicated a frequency of 0 to 2 public meetings per year. Two respondents indicated a frequency of 2 to 4 public meetings per year (Table 28, p. 138).

Among the personnel of Highland County's SCS and SWCD office, three staff members indicated that 2 to 4 public meetings occurred each year. One respondent indicated the frequency of public meetings to be 0 to 2 per year (Table 28, p. 138).

Table 28. Number of Public Meetings Held by Clinton, Highland and Warren Counties Per Year

Frequency	No. of Respondents/County			Total No. of Respondents	Percent of Total
	Clinton	Highland	Warren		
0 to 2	1	1	2	4	40
2 to 4	2	2	1	5	50
4 to 6	0	0	0	0	0
6 and above	0	1	0	1	10

Two members of the Warren County SCS and SWCD staff indicated the frequency of public meetings to be between 0 and 2 per year. One staff member indicated a frequency of 2 to 4 public meetings per year (Table 28, p. 138).

Summary

For Question 5 of Section I, the researcher asked SCS and SWCD personnel for each of the study counties to indicate the frequency of personal contacts per staff member, bulletins/ flyers, field demonstrations, tours, clinics, and public meetings in their respective counties. With the exception of personal contacts per staff member, the responses of agency personnel were divided into two or more frequency ranges. Personal contact was the only form of communication for which all respondents indicated the same frequency range (5 to 10 contacts per staff member per week).

For the other five communication forms, the majority of agency personnel were grouped as follows: bulletins/flyers - 60% indicated 0 to 5 per year; field demonstrations - 50% indicated 0 to 2 per year and 40% indicated 2 to 4 per year; tours - 50% indicated 0 to 2 per year and 50% indicated 2 to 4 per year; clinics - 50% indicated 0 to 2 per year and 40% indicated 2 to 4 per year; and public meetings - 60% indicated 2 to 4 per year.

Section II. Conservation Information Through Television

Section II of the survey contained nine questions designed to evaluate the use of television in the dissemination of conservation information.

In all three survey counties, respondents indicated that television was not used by their respective districts to convey information to farmers. Seven of the 10 total respondents did not answer any of the questions regarding television use. Three respondents answered Questions 6, 8, and 9 of this section. These three questions asked: 1) how districts use television (for this question, the researcher assumed the responses were indications of how television would be used if the district was using television as a form of communication), 2) the amount of television time used to cover and/or promote district activities, and 3) the amount of television time used to convey conservation information to farmers. The results of these questions (although very limited) will be addressed according to their respective counties.

In Clinton County, none of the questions regarding television were answered. Therefore, no additional observations can be made with regard to current or future use of television as a means of communicating conservation information.

Among Highland County's SCS and SWCD personnel, only one respondent answered any of the questions regarding the use of television after indicating that the Highland County SCS and SWCD office did not use television to convey conservation information to farmers. The respondent answered Question 6 of this section, which inquired about the district's use of television. From the list of 10 potential uses, the respondent indicated television would be used to promote the SCS and SWCD, to inform farmers and the general public about conservation issues, to encourage farmers to adopt best management practices, and to encourage farmers to adopt no-till farming.

All three members of the Warren County SCS and SWCD office indicated their office did not use television to convey conservation information to farmers. Two staff members did not answer any additional questions presented in this section. One staff member responded to Questions 6, 8, and 9, indicating that the Warren County office would use television to encourage farmers to adopt no-till farming, that more television time should be devoted to the coverage and/or promotion of district activities, and that more television time should be devoted to conveying conservation information to farmers, respectively.

Section III. Conservation Information Through Radio

Section III was comprised of 11 questions designed to evaluate the use of radio as a means of communicating conservation information to farmers.

Overall response to this series of questions was significantly better than to Section II questions regarding television. Eight of the total 10 respondents answered 10 of the 11 questions. The one question unaswered by all eight respondents regarded station call letters, frequencies and locations for those radio stations (other than the local radio station) which broadcasted conservation information for the respective districts. The filter question preceding this question revealed that none of the districts were broadcasting conservation information through radio stations other than the local stations.

Question 1: Does your district use radio to convey conservation information to farmers?

Question 1 was designed as a filter question for Questions 2 through 11. A negative response to this question would have eliminated the necessity for respondents to answer any other questions which followed Question 1.

All three respondents from the Clinton County SCS and SWCD office indicated that their district was using radio to convey conservation information.

All four respondents from the Highland County SCS and SWCD office indicated that their district was using radio to convey conservation information.

Only one member of the Warren County SCS and SWCD office indicated that the Warren County office was using radio to convey conservation information to farmers. The other two members of the Warren County office did not respond to the questions regarding radio as a mode of communication.

Question 2: If yes, does your district broadcast its announcements through a local radio station?

Similar to Question 1, Question 2 functions as a filter question for Question 3. However, its primary purpose is to determine whether or not local radio stations are being used to inform farmers about conservation.

All three respondents from Clinton County's SCS and SWCD office indicated that they were using a local radio station to reach farmers with conservation information.

All four respondents from Highland County's SCS and SWCD office indicated that a local radio station was being used to convey conservation information to farmers.

The single respondent from the Warren County SCS and SWCD office indicated that a local radio station was being used to convey conservation information to farmers.

Question 3: If yes, please specify: 1) station call letters, 2) station frequency (AM/FM), and 3) station location.

Responses to Question 3 provided specific information by which the researcher became aware of the identity of the local radio station which is broadcasting conservation information. In the answers to this question, the researcher was looking for consistency and agreement among district personnel.

All of Clinton County's SCS and SWCD personnel indicated that WKFI-AM (Wilmington, Ohio) was the radio station which broadcasta announcements for the Clinton County SCS and SWCD office. In addition, one respondent also indicated that WSWO-FM (Wilmington, Ohio) was a local station which broadcasts announcements for the Clinton County SCS and SWCD office.

All of Highland County's SCS and SWCD personnel identified WSRW (both AM and FM) of Hillsboro, Ohio as the local radio station which broadcasts announcements for the Highland County SCS and SWCD office.

The respondent from the Warren County SCS and SWCD office identified WPFB (AM and FM) of Middletown, Ohio as the local radio station which broadcasts announcements for the Warren County SCS and SWCD office.

Question 4: Does your district broadcast its radio announcements through radio stations other than a local radio station?

Question 4 was included in the survey in anticipation of the possibility that some SCS and SWCD offices might be working with more than one radio station (in addition to the local station) in order to reach as many of the county's farmers as possible. In addition, the question was designed for the counties which did not have a local radio station, and were using radio stations outside the immediate area to broadcast their radio announcements. Question 4 also functioned as a filter question for Question 5 which requested the call letters, frequency and location of the non-local radio stations being used by the district office.

All three respondents from the Clinton County SCS and SWCD indicated that no radio station other than the local station WKFI-AM was broadcasting information for the Clinton County SCS and SWCD office.

All four respondents from the Highland County SCS and SWCD office indicated that no radio station, other than WSRW in Hillsboro, Ohio was broadcasting information for the Highland County SCS and SWCD office.

The Warren County respondent indicated that no other radio station other than WPFB of Middletown, Ohio was broadcasting information for the Warren County SCS and SWCD office.

Question 6: What format does your district use for its radio time?

Question 6 was designed to determine how SCS and SWCD offices were using their radio time. The possible responses provided by the researcher were 1) program format aired at a regular time, 2) commercial type announcements (1 to 2 minutes in duration) contracted to air at various times, and 3) other (this option was provided for responses which did not fall under responses 1 and 2, or in cases where the respondents were not clear as to the exact definition of program and/or commercial formats, but knew what types of activities their office was broadcasting over the radio).

Clinton County's SCS and SWCD personnel recorded a variety of answers for this question. All respondents checked "other" and provided information about the types of radio formats used by their office. One respondent checked both "other" and "commercial", and one respondent checked all three responses. Formats listed as "other" were short radio "spots", interviews, and live question and answer sessions.

Among Highland County's SCS and SWCD personnel, three respondents indicated that a commercial format was used to broadcast information to farmers. In addition, one respondent indicated the use of a program format aired at a regular time. Listed under "other", one respondent indicated the use of an occasional release of five to ten minute duration.

The respondent from the Warren County SCS and SWCD office indicated that a commercial type format was used for the district's radio announcements.

Question 7: District announcements are broadcast (daily, weekly, monthly, other).

Responses to Question 7 indicated that Clinton County uses radio sporadically to inform farmers about conservation. All three respondents checked "other" as a response, specifying that radio announcements were broadcast for special activities, at various times, and when needed. One respondent also checked "monthly" as a response.

Three respondents from the Highland County SCS and SWCD office checked "other" for Question 7. Two of these respondents wrote in "occasionally" and "whenever needed". The third respondent did not write in a response for "other". One respondent indicated monthly radio broadcasts.

The one respondent from Warren County indicated that the radio broadcasts for the district were aired on an irregular basis.

Question 8: Indicate on the following list how your district uses radio time.

For Question 8, the researcher listed 10 potential uses for radio broadcasts as well as an "other" category for uses not on the list.

All three Clinton County respondents indicated that radio time was used for the promotion of: the SCS and SWCD, public meetings, clinics, field demonstrations, and tours. In addition, one respondent indicated that radio time was used to encourage farmers to adopt no-till farming. Another respondent indicated that farmers and the general public were informed about conservation issues, and that farmers were encouraged to adopt best management practices, as well as encouraged to adopt no-till farming through radio broadcasts.

All four respondents from Highland County's SCS and SWCD office indicated that radio time was used to promote tours and to encourage farmers to adopt no-till farming. Three respondents indicated that radio time was used to promote the SCS and SWCD, and to promote public meetings. Two respondents indicated that farmers and the general public were informed about conservation issues, and that farmers were encouraged to adopt best management practices through radio broadcasts. Promoting clinics and field demonstrations, and informing farmers and the general public about agricultural issues were each named by one respondent as district uses for radio time. None of the Highland County SCS and SWCD personnel indicated that radio time was used to encourage farmers to become district cooperators.

The respondent from the Warren County SCS and SWCD office indicated that radio time was used to promote public meetings, clinics, and field demonstrations, to inform farmers and the general public about agricultural issues, to encourage farmers to adopt no-till farming, and to sell the district's tree packet.

Question 9: Indicate which of the following reasons for using radio applies to your district.

Question 9 provided three potential reasons for using radio, as well as an "other" response.

Each of Clinton County's SCS and SWCD personnel indicated that their district used radio because it reaches a wide range of audiences. In addition, two respondents indicated that their district used radio because it was a cost-effective means by which to convey conservation information. None of the respondents indicated that their district used radio because other districts were using radio to convey conservation information, and none of the respondents listed "other" reasons for using radio.

Three members of the Highland County SCS and SWCD office indicated that their district used radio because it easily reaches a wide range of audiences. In addition, three members of the SCS and SWCD office indicated the cost-effectiveness of radio as a reason for using radio to convey conservation information to farmers. None of the respondents indicated that their district used radio because other districts were using radio to convey conservation information. No other reasons were listed for using radio.

The respondent from Warren County SCS and SWCD office indicated that the cost-effectiveness of radio, and the timeliness of radio were reasons for using radio in Warren County.

Question 10: The amount of radio time used to cover and/or promote district activities (should be more, is adequate, should be less).

Question 10 was designed to determine how agency personnel felt about the amount of radio time devoted to district activities. A similar question was asked of farm owners/operators in order to compare the perceptions of the sender and receiver.

Two Clinton County respondents indicated that radio time devoted to the coverage and/or promotion of district activities was adequate. One respondent indicated that the amount of radio time should be more.

Two Highland County respondents indicated that radio time devoted to the coverage and/or promotion of district activities should be more. The other two respondnets indicated that the amount of radio time devoted to the coverage and/or promotion of district activities was adequate.

The respondent from Warren County indicated that more radio time should be devoted to the coverage and/or promotion of district activities.

Question 11: The amount of radio time used to convey conservation information, in general (should be more, is adequate, should be less).

Question 11 is similar to Question 10 in that it asks respondents to indicate how they felt about the amount of radio time used by the district. However, in this case, the subject matter is the broad category of conservation information.

Two Clinton County respondents indicated that more radio time should be devoted to conservation information. One respondent indicated that the amount of radio time devoted to conservation information is adequate.

Three Highland County respondents indicated that the amount of radio time used to convey conservation information should be more. One respondent indicated that the amount of radio time devoted to conservation information was adequate.

The Warren County respondent indicated that more radio time should be used to convey conservation information to farmers.

Summary

Each of the county SCS and SWCD offices for Clinton, Highland, and Warren Counties indicated they were using radio as a means of conveying conservation information to farmers. In addition, each county indicated that its radio announcements were broadcast by the district's local radio station, and that no other radio station aside from the local station was broadcasting the district's radio announcements.

A single type of radio announcement did not dominate the responses from agency personnel. Most responses came under the category "other". From these responses, the researcher derived that the majority of district radio announcements are short in length, and are broadcast at irregular intervals. Agency responses also indicate that districts occasionally use interviews and longer program formats to broadcast conservation information and information about district activities.

Agency personnel named the promotion of public meetings and tours, and encouraging farmers to adopt no-till farming most frequently as uses for radio. Each of these purposes were named by 70% of the respondents. Following these three purposes were the promotion of the SCS and SWCD (60%), the promotion of clinics and field demonstrations (50% for each), informing farmers and the general public about conservation issues and encouraging farmers to adopt best management practices (30% for each); and informing farmers and the general public about agricultural issues (20%).

Seventy percent of the surveyed SCS and SWCD personnel indicated their district used radio because it reached a wide range of audiences. Sixty percent indicated the cost-effectiveness of radio was a reason for using radio to convey conservation information to farmers. None of the respondents indicated their district used radio to convey conservation information because other districts were using radio.

Only 80% of the SCS and SWCD personnel gave their opinions regarding the amount of radio coverage devoted to district activities and conservation information. The responses were equally divided on district activities: four respondents indicated that radio coverage of district activities should be more, and four indicated that radio coverage of district activities was adequate. However, with regards to radio time devoted to conservation information, six respondents indicated that more radio time should be devoted to the coverage of conservation information, while only two respondents indicated that radio coverage of conservation information was adequate.

Section IV. Conservation Information Through Newspapers

Section IV consisted of 10 questions designed to provide a general picture of how the respective SCS and SWCD county offices were utilizing newspapers to inform farm owners/ operators about conservation. In order to generate this picture, agency personnel were asked to answer questions regarding the type of newspaper format used by their office, the identity of the newspaper/s which provides regular coverage of district activities, the frequency of that coverage, the type of information released through the newspaper, newspaper coverage exclusive of a regular column, news releases submitted by the agency, the agency's access and/or contact with the local farm editor and their opinions regarding the amount of newspaper coverage devoted to district activities, and to conservation in general.

In addition to providing a general picture of newspaper use, the researcher intended the questions to provide information regarding the strengths and weaknesses in the agency's use of this communication mode. The information generated by the responses will be used to make recommendations as to changes which might improve the effectiveness of newspaper coverage of district activities and conservation information.

Question 1: Does your district have a regular news column in a local newspaper?

The purpose of this question was three-fold: 1) to determine if county SCS and SWCD offices were using local newspapers to inform farmers of district activities and/or conservation information, 2) if SCS and SWCD offices had a regular outlet in newspapers to write about conservation and/or district activities, and 3) to serve as a filter question for Questions 2 and 3 (These questions asked respondents for more details concerning the identity of the newspaper in which the column appeared, the frequency of the column's printing, and the type of information printed in the column.).

All three respondents from the Clinton County SCS and SWCD office indicated that their district did have a regular column in a local newspaper.

Only two of the four members of the Highland County SCS and SWCD office indicated that their district had a regular column in a local newspaper. These two respondents answered all the questions in this section. The other two members of the staff answered only Questions 9 and 10 of this section.

All three respondents from the Warren County SCS and SWCD office indicated that their district did have a regular news column in a local newspaper.

Question 2: If yes, please specify a) the name of the newspaper, and b) the frequency of the column.

All three respondents from the Clinton County SCS and SWCD office identified the Wilmington News Journal as the newspaper which printed their district's conservation column. In addition, both respondents indicated that the column appeared weekly.

The two Highland County SCS and SWCD office persons who answered Question 1 of this section, both named the Hillsboro Press Gazette as the local newspaper which printed their district's conservation column. In addition, both respondents indicated that the column was printed biweekly.

All three respondents from Warren County SCS and SWCD office identified the Western Star as the newspaper which printed their district's conservation column. In addition, each respondent indicated that the district column was printed weekly.

Question 3: The information presented in the column (6 choices plus "other")

For Question 3, the researcher provided six responses regarding the type of information presented in the news column, and the usefulness of that information to farmers and the general public. In addition, respondents were provided with an "other" category followed by space to write in answers not covered by the six provided responses.

The six responses provided for Question 3 were 1) relates information useful only to district cooperators, 2) relates only agricultural information, 3) relates only conservation information, 4) relates both agricultural and conservation information, 5) can be useful to most (or all) farmers, and 6) promotes SCS and SWCD activities.

All three respondents from Clinton County's SCS and SWCD office indicated that the information presented in the district's conservation column related both agricultural and conservation information could be useful to most (or all) farmers, and promoted SCS and SWCD activities. One respondent wrote an additional comment under "other" indicating that he felt the information presented in the column could be helpful to all landowners and people in the county.

Both Highland County respondents indicated that the information presented in the district column related both agricultural and conservation information, and that the information could be useful to most (or all) farmers. In addition, one respondent indicated that the information in the district column promoted SCS and SWCD activities.

Each of the three respondents from the Warren County's SCS and SWCD office indicated that the information presented in the district column related both agriculatural and conservation information, and promoted SCS and SWCD activities. Two respondents also indicated that the district column presented information useful to most (or all) farmers. Under "other", one respondent said the information in the district column explained conservation, gave tips, and promoted ideas.

Question 4: Does information concerning your district appear in the newspaper outside a regular column?

In posing this question, the researcher was interested in learning if SCS and SWCD offices were limiting their newspaper exposure to the district conservation column.

Each of the respondents from Clinton County's SCS and SWCD office indicated that information concerning their district did appear in other portions of the newspaper.

Both respondents from Highland County's SCS and SWCD office indicated that information concerning their district did appear in other portions of the newspaper.

All three respondents from Warren County's SCS and SWCD office indicated that information concerning their district did appear in other portions of the newspaper outside the regular column.

Question 5: If yes, what percentage of the articles are the result of news releases submitted by your office? (0 to 10%, 10 to 25%, 25 to 50%, greater than 50%)?

All three respondents from Clinton County's SCS and SWCD office indicated that greater than 50% of the articles containing information which pertained to their district were the result of news releases submitted to the newspaper by the district office.

One Highland County respondent indicated that only 10% to 25% of the articles in the newspaper were the result of news releases submitted by their office. The other respondent indicated that greater than 50% of the news articles in the paper were the result of news releases submitted by the Highland County SCS and SWCD office.

Each member of the Warren County SCS and SWCD office indicated a different percentage of articles resultant from news releases submitted by their office. Respondents checked 0% to 10%, 25% to 50%, and greater than 50%.

Question 6: When your office submits a news release, what percentage of the information is actually used by the newspaper (o to 25%, 25 to 50%, 50 to 75%, 75 to 100%)?

Each of the respondents from Clinton County's SCS and SWCD office indicated that 75% to 100% of the information submitted in their news releases was actually used by the newspaper.

One staff member of the Warren County SCS and SWCD office indicated that only 25% to 50% of the information submitted in the office news releases was actually used by the newspaper. Two staff members indicated that 75% to 100% of the information submitted in the office news releases was actually used by the newspaper.

Question 7: Do you know who the farm editor is of the newspaper to which you submit news releases?

Only two respondents from the Clinton County SCS and SWCD office indicated they knew who the farm editor was of the newspaper to which they submitted news releases.

Only one of Highland County's SCS and SWCD personnel indicated he knew who the farm editor was of the newspaper to which their news releases were submitted.

All three respondents from Warren County's SCS and SWCD office indicated they knew the farm editor of the newspaper to which they submitted news releases.

Question 8: If yes, do you have regular contact with the editor about district activities and/or conservation information you think farmers should know?

Similar to Question 7, only two respondents from the Clinton County SCS and SWCD office indicated that they did have regular contact with the farm editor about district activities and/or conservation information they thought farmers should know. The respondent who indicated that he did not have regular contact with the farm editor also indicated (in response to Question 7) that he did not know who the farm editor was.

None of the Highland County SCS and SWCD personnel indicated that they had regular contact with the local farm editor regarding activities and/or conservation information they thought farmers should know.

Two members of the Warren County SCS and SWCD staff indicated they had regular contact with the local farm editor regarding district activities and/or conservation information they thought farmers should know.

Question 9: The use of newspapers to inform farmers about district activities (should be more, is adequate, should be less).

Only one respondent from the Clinton County SCS and SWCD office indicated that more use should be made of newspapers to inform farmers about district activities. Two respondents indicated that adequate use was being made of newspapers for informing farmers about district activities.

Three of Highland County's SCS and SWCD personnel indicated that more use should be made of newspapers to inform farmers about district activities. One respondent indicated that adequate use was being made of newspapers for informing farmers about district activities.

Two respondents from the Warren County SCS and SWCD office indicated that adequate use was made of newspapers to inform farmers about district activities. One respondent indicated that more use should be made of newspapers to inform farmers about district activities.

Question 10: The use of newspapers to convey conservation information to farmers (should be more, is adequate, should be less).

All three respondents from Clinton County's SCS and SWCD office indicated that use of newspapers to convey conservation information to farmers was adequate.

All respondents from the Highland County SCS and SWCD office indicated that more use should be made of newspapers to convey conservation information to farmers.

Two respondents from the Warren County SCS and SWCD office indicated that adequate use was made of newspapers to convey conservation information to farmers. One respondent indicated that more use should be made of newspapers to convey conservation information to farmers.

Summary

Each of the three SCS and SWCD offices surveyed for this study indicated their districts conveyed conservation information through newspapers. Each office identified a single local newspaper as the source of their conservation articles, and indicated that newspaper published their district conservation column on a regular basis, in addition to publishing conservation information in other parts of the newspaper.

Survey results further indicated that the information presented in the district column related both agricultural and conservation information could be useful to most (or all) farmers, and promoted SCS and SWCD activities.

Survey results indicated that anywhere from 0% to greater than 50% of the district's news articles were the results of news releases submitted by the agency, and that the newspapers generally used 75% to 100% of the information submitted in the release for the news articles.

Sixty percent of the agency respondents indicated they knew who the farm editor was for the newspaper to which they submitted their news releases. However, only 40% of the respondents indicated they had regular contact with the editor regarding district activities and/or conservation information they thought farmers should know.

Agency personnel were equally divided on their opinions regarding the use of newspapers to inform farmers about district activities and/or conservation. Fifty percent indicated that more use should be made of newspapers to inform farmers about conservation and/or district activities. Fifty percent indicated that adequate use was being made of newspapers to inform farmers about district activities and/or conservation.

Section V. Conservation Information Through Magazines

Section V contained nine questions designed to provide information regarding the use of magazines by the SCS and SWCD as a mode of communication. Questions in Section V covered the following areas: frequency of use; list of potential magazines related to Ohio farming and farmers; articles submitted by the SCS and SWCD; contacts between the SCS and SWCD, and magazine editors; and use of contacts as sources of information regarding district activities or conservation information.

Similar to Section II (Conservation Information Through Television), the overall response to Section V was negative (although not poor). Each of the respondents from Clinton County's SCS and SWCD indicated their district did not use magazines to convey conservation information to farmers. Following this question, only two of the three respondents answered additional questions regarding magazines. One respondent answered Questions 5 through 9, and one respondent answered Questions 6 through 10. What follows is a summary of those responses.

The answers provided by the two Clinton County SCS and SWCD persons indicated that Clinton County's SCS and SWCD office does not submit stories for publication in magazines (Question 5). Nor does it maintain a list of magazines (Question 6) or names of magazine editors (Question 7) to whom articles could be submitted for publication. However, SCS/SWCD personnel did indicate that the use of magazines to inform farmers about district activities (Question 8), and as a means of conveying information to farmers (Question 9) should be more.

Three of Highland County's SCS and SWCD personnel indicated their office did not use magazines to convey information to farmers. Of the questions which followed, these respondents only answered Questions 8 and 9 which inquired about the amount of magazine coverage of district activities and conservation information. The one respondent who indicated that magazines were used by the Highland County SCS and SWCD responded to all questions which followed. His responses to Questions 2 through 7 are summarized in the following paragraph.

The respondent indicated that the Highland district used magazines to convey conservation information to farmers 0 to 4 times during 1982, named the Ohio Farmer as the magazine which printed the story concerning the Highland District, and indicated that only 0% to 10% of the articles printed in magazines are written by district personnel. Although the respondent indicated that the Highland District maintains a list of magazines to which they submit articles, he also indicated that the Highland district does not regularly submit articles for publication, nor does the district maintain a list of magazine editors to whom articles should be submitted for publication.

Two of the four Highland County SCS and SWCD personnel indicated that more use should be made of magazines to convey conservation information to farmers. The other two staff members indicated that adequate use was being made of magazines to inform farmers about district activities.

Three respondents from Highland County's SCS and SWCD office indicated that more use should be made of magazines to convey conservation information to farmers. One respondent indicated that adequate use was made of magazines to convey conservation information to farmers.

Only one member of the Warren County SCS and SWCD staff answered questions regarding the use of magazines to convey conservation information to farmers. One respondent indicated that adequate use was made of magazines to convey conservation information to farmers.

Only one member of the Warren County SCS and SWCD staff answered questions regarding the use of magazines to convey conservation information to farmers. The respondent indicated that the Warren County office did not use magazines to convey conservation information to farmers, that in the last year the district used magazines to convey conservation information 0 to 4 times, and that the magazine Midweek printed an article concerning the Warren County district. Furthermore, the respondent indicated that greater than 50% of the articles printed in the magazine were written by district personnel, that the district did not regularly submit articles to magazines for publication, and did not maintain a list of magazines or magazine editors to which articles could be submitted for publication. The respondent indicated that more use should be made of magazines to inform farmers about district activities, and to convey conservation information to farmers.

The responses provided by agency personnel regarding magazines as a means of communicating conservation information indicate that districts are not using magazines to convey conservation information. However, agency personnel seem to feel that more use should be made of magazines to provide farmers with information about conservation and district activities.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Purpose

The purpose of this study was to evaluate the effectiveness of various modes of communication used by the U.S. Department of Agriculture Soil Conservation Service (SCS) and Soil and Water Conservation Districts (SWCD) to convey conservation information to farmers. Based on this evaluation, a series of recommendations were made to the agencies involved as to which method or methods of communicating conservation information is best suited to the educational needs of the farming communities surveyed.

B. Study Goals and Objectives

Prior to initiating this study, the researcher established two goals and seven objectives which are listed in Chapter II. These goals and objectives served to narrow and focus the scope of this study. In addition, they were believed to be achievable goals and objectives for this study.

C. Methodology

In order to achieve results representative of a "dual perspective", the researcher secured a population of "senders", SCS and SWCD professional personnel, and a population of "receivers", farmers from three counties. A total of 10 SCS and SWCD professional personnel, three from Clinton County, four from Highland County and three from Warren County comprised the population of "senders". A total of 195 farmers (2.8% of the total 7,088 farmers) were selected at random from Clinton, Highland and Warren Counties (65 farmers from each county) to make up the population of "receivers".

A total of 43 surveys were returned by farmers and considered usable for this study. This is approximately a 22% return. Clinton County had the highest individual return (26.2%). Highland and Warren Counties had equal return percentages (20.0%).

Questionnaires designed to evaluate 11 communication modes common to SCS and SWCD offices and familiar to farmers were distributed to both groups from February through April, 1983. Respondents were asked to rate the effectiveness of communication modes relative to each other and on an individual basis and to rate the trustworthiness of communication modes relative to each other and on an individual basis. Respondents were also asked to identify mass media sources of conservation information, the frequency of use or exposure to each mass medium source, and their opinions regarding the amount of coverage provided by mass media for district activities and conservation information.

Responses to questionnaires were recorded on two separate master sheets. Questions which requested individual ratings were assigned a numeric value for each degree of effectiveness or trust. An average rating was calculated for each mode of communication by multiplying the total number of responses for each degree of effectiveness or trust by the assigned numeric value, totalling those values, and dividing by the total number of respondents. For the questions which requested relative ratings, the ratings for each communication mode were totalled and averaged. All questions which did not require the rating of communication forms were analyzed and interpreted based on percentages of the sample population.

D. Summary of Survey Results

A comparison of the survey results from agency personnel and farmers showed that the senders and receivers of conservation information are connected by the same communication networks. All communication forms identified for use by SCS/SWCD personnel were identified by farmers as communication forms they were familiar with or had experience with.

The average numeric ratings given by agency personnel and farmers to each communication form indicating its perceived degree of effectiveness (not effective, somewhat effective, effective, very effective) were generally very close. These ratings seemed to indicate that the perceptions of farmers and agency personnel are similar because their respective ratings placed the communication modes under identical degrees of effectiveness. Three of the five communication forms determined to be most effective by both farmers and agency personnel were identical, and held identical positions when ranked among the top five communication forms. The three modes, personal contact, newsletters and newspapers, ranked first, third and fourth, respectively.

When farmers and agency personnel were asked to rank order communication forms relative to each other (most effective to least effective), the two groups identified the same communication modes for four of the five most effective communication modes, although their actual ranks were different. The ranking for the four communication modes are as follows: personal contact (first-farmers, second-agencies), district newsletter (first-farmers, second-agencies), field demonstrations (fourth-both agencies and farmers), and tours (third-farmers, fifth-agencies). Furthermore, the two groups also gave similar rankings to public meetings (sixth-agencies, seveth-farmers), clinics/workshops (eighth-both agencies and farmers) and television (tenth-agencies, eleventh-farmers). These results seem to lend further credence to the idea that agency personnel and farmers have similar perceptions regarding the effectiveness of communication methods.

A comparison of farmers opinions regarding the effectiveness of communication modes and the trustworthiness of communication modes seems to indicate a relationship between the trust placed in a communication mode and the perceived effectiveness of that mode. Although not listed in the same order, the five communication forms identified as most effective by farmers were also identified by farmers as the most trusted sources of information. Similarly, communication modes with high individual effectiveness ratings had correspondingly high ratings of trustworthiness. Furthermore, the low effectiveness rating given to television corresponds with the low trust rating as well as with the fact that districts did not use television.

Radio was identified by all agency respondents as a means of conveying conservation information to farmers and a source of conservation information by 62.8 percent of the surveyed farmers. Survey responses further indicated that farmers were hearing conservation information through the stations identified by agency personnel as broadcasters of district conservation information, and that the hours of 5 a.m. to 7 a.m. and 11 a.m. to 1 p.m. were the hours of the day when the most farmers heard conservation information.

Agency personnel and farmers differed in their opinions regarding the amount of radio time devoted to the coverage of conservation information. Sixty percent of the agency personnel and 23.3% of the farmers indicated that more radio time should be devoted to the coverage of conservation information. Twenty percent of the agency personnel and 51.2% of the farmers indicated that adequate radio time was devoted to the coverage of conservation information.

The majority of agency personnel (60%) and the majority of farmers surveyed (76.6%) identified newspapers as a source of conservation information. Although farmers identified 11 newspapers as sources of conservation information, they most frequently identified the three local newspapers identified by SCS and SWCD personnel as the newspapers which published their district conservation column and stories about the district.

Agency personnel indicated that conservation information appeared in portions of the newspaper outside the district conservation column. The responses from farmers ran parallel to this with 55.8% of the respondents indicating that they read conservation information in both the district column and other portions of the newspaper, or in straight news stories or articles which appear in the paper.

Agency personnel and farmers seemed to be in agreement about the amount of newspaper coverage devoted to conservation information. Fifty percent of the agency personnel indicated newspaper coverage of conservation information was adequate. Approximately 44% of the farmers agreed with this assessment. The other 50% of the agency personnel indicated that newspaper coverage of conservation information could be greater. Approximately 39.5% of the farmers responded similarly.

Responses from the surveyed SCS and SWCD offices indicated that the agencies were not using magazines to convey conservation information to farmers. However, both the Highland County and Warren County SCS and SWCD offices indicated that stories concerning their respective counties had appeared in Ohio Farmer and Midweek during the past year. Despite the negative responses to this series of questions, 60% of the agency respondents indicated that more use should be made of magazines to convey conservation information as well as information about district activities to farmers.

The majority of the farmers surveyed (72.1%) indicated they received conservation information through magazines. Nine magazines were identified by farmers as sources of conservation information. Ohio Farmer, Farm Journal and Successful Farmer were the most frequently identified magazines which provided conservation information.

The majority of the surveyed farmers (55.8%) indicated that adequate use was being made of magazines to convey conservation information. Only 20.9% of the respondents thought more conservation information should be provided through magazines.

Although none of the surveyed SCS and SWCD offices indicated a current use of television to inform farmers about conservation, responses from two of the surveyed counties indicated some interest in television as a future method of communication. Responses from Highland and Warren Counties identified four potential uses for television: promoting the SCS and SWCD, informing farmers and the general public about conservation issues, encouraging farmers to adopt best management practices, and encouraging farmers to adopt no-till farming.

The responses from the farming community paralleled those of the county SCS and SWCD offices. Only 16.3% of the surveyed farmers indicated they received conservation information from television. The majority of farmers (76.7%) indicated they did not receive conservation information through television. However, some respondents did express interest in seeing conservation information on television. Approximately one third of the surveyed farmers indicated that more television time should be devoted to the coverage of conservation information.

E. Conclusions Based on Hypotheses

The following conclusions have been drawn from the study results based on the hypotheses set forth in Chapter I.

1. The analysis of survey results indicated that SCS and SWCD personnel consistently rated communication forms which involved personal contact as more effective than communication forms which did not involve personal communication. This supports the hypothesis that SCS and SWCD personnel perceive communication forms involving personal contact to be more effective than communication forms which do not involve personal contact.

2. The comparison of individual effectiveness ratings and relative effectiveness ratings neither proves nor disproves the hypothesis that the relative effectiveness rating of a communication mode is influenced by the individual effectiveness rating assigned by agency personnel. Throughout the three survey counties, only personal contact received a consistently high rating both individually and relative to other communication forms. The positioning (rating) of the remaining communication forms did not appear to be influenced by the individual ratings.

3. Data provided by survey respondents neither confirmed nor denied the hypothesis that SCS and SWCD personnel will use most frequently those communication forms

which they judge to be the most effective. Trying to determine if a relationship exists between effectiveness and frequency of use was difficult because survey respondents indicated that most of the communication forms in question were used sporadically. The researcher's past experience with communication forms used by the SCS and SWCD seemed to indicate that the affordability and availability of a particular communication mode were more significant factors than effectiveness when deciding which communication mode or modes should be used for a particular event.

4. The analysis of the survey results provided by farmers neither proved nor disproved the hypothesis that farmers perceive communication forms which involve personal contact to be more effective than communication forms which do not involve personal contact. The perceived effectiveness of personal and non-personal communication forms varied among the surveyed counties. Clinton County respondents rated non-personal communication forms more effective. Highland County respondents rated most non-personal communication forms less effective. Warren County farmers favored neither personal nor non-personal communication forms in terms of effectiveness. The final analysis of all farmers revealed that farmers do not perceive communication forms to be any more or any less effective based

on whether the forms are personal or non-personal communication forms.

5. The comparison of individual effectiveness ratings to relative effectiveness ratings does not support the hypothesis that high individual effectiveness ratings necessarily result in high effectiveness ratings when communication modes are rated relative to each other.

6. The results from the farmer surveys neither proved nor disproved the hypothesis that farmers place more trust in conservation information received through a source which involves personal contact than information received through a non-personal communication source.

7. Similarly, the results from the farmer survey neither proved nor disproved the hypothesis that the rating of trustworthiness given to an individual communication mode by a farmer will influence the rating of trustworthiness relative to the communication modes given by a farmer.

F. Recommendations

The following is a series of recommendations to the SCS and SWCD offices of Clinton, Highland and Warren Counties. These recommendations are based on the aforementioned conclusions as well as the results of the study. No sequence or time table has been established for the consideration and implementation of these recommendations. However, it is believed that these recommendations should be reviewed and considered for implementation as part of each district's ongoing communication/information program.

1. Districts should continue to emphasize personal contact, the district newsletter, radio and the local newspaper as means to communicate conservation information to farmers.

2. Districts should publicize more rigorously the special activities such as tours, clinics and field demonstrations held in their counties so more farmers will be aware of these activities.

3. Districts should attempt to coordinate their special activities with other districts in order to provide for the mutual interests of farmers in neighboring communities.

4. Districts should continue to use mass media to promote district activities and to communicate conservation information by:

a. maintaining and/or increasing the utilization of radio, particularly during the hours of 5-7 a.m. and 11 a.m. - 1 p.m., and

b. maintaining and/or increasing the use of local newspapers.

5. Districts should place more emphasis on magazines as a source of conservation information by:

a. focusing attention on magazines such as Ohio Farmer, Farm Journal, and Successful Farmer,

b. compiling a list of names and addresses of magazines to which articles can be submitted by district personnel for publication,

c. developing a working relationship with magazine editors similar to that with the local newspaper farm editor to assist districts with the writing and publishing of district and/or conservation news, and

d. writing and submitting more articles for consideration to editors of farm and natural resources management magazines.

6. Additional investigation should be made into the current use and future potential of television as a source of conservation information.

7. Studies should be conducted to determine if district technicians perceive the effectiveness of communication modes differently from the district conservationist and to determine if differences in perceptions are job related.

BIBLIOGRAPHY

BOOKS

Archer, Sellers G. Soil Conservation. University of Oklahoma Press, 1956.

Held, R. Burnell, and Marion Clawson. Soil Conservation in Perspective. Baltimore, Maryland: The John Hopkins Press, 1965.

Simms, D. Harper. The Soil Conservation Service. New York: Praeger Publishers, Inc., 1970.

PERIODICALS

Carlson, Floyd E. "A Better Conservation Program Through Radio." Journal of Soil and Water Conservation. September, 1956, pp. 222-225.

Partain, Lloyd, E. "Conservation's Challenge to Journalism." Journal of Soil and Water Conservation. July, 1957, pp. 173-175.

UNPUBLISHED MATERIAL

Christiansen, James Edward. "The Adoption of Educational Innovations Among Teachers of Vocational Agriculture." Ph.D. dissertation, Department of Agricultural Education, Columbus, Ohio, The Ohio State University, 1965.

Crabbe, Leslie Fennen. "Use of Mass Media in Public Relations by Ohio Teachers of Vocational Agrictulture." M.A. thesis, Department of Agricultural Education, Columbus, Ohio, The Ohio State University, 1963.

Hinson, David Harry. "An Analysis of Soil Conservation Information as Used in Wayne County, Ohio." M.A. thesis, Department of Agricultural Education, Columbus, Ohio, The Ohio State University, 1967.

Welsh, Robert Stanley. "Factors Contributing to Successful Adult Farmer Programs in Vocational Agriculture in Ohio." M.S. thesis, Department of Agricultural Education, Columbus, Ohio, The Ohio State University, 1969.

REPORTS

Kroetz, Marion E., *et al.* *Farmers' Attitudes and Conservation Practices which Affect Agricultural Water Quality in Northwest Ohio*. Departments of Agricultural Economics and Rural Sociology, Agronomy, The Ohio Cooperative Extension Service, The Ohio State University, December, 1979.

Ladewig, Howard and Ted Jones. *Tillage Systems Used by Ohio Farmers*. The Ohio Cooperative Extension Service, The Ohio State University, 1981.

Schmidt, Walter H. and Raymond A. Schindler. *Upper Honey Creek Farmer Survey*. Defiance and Fremont County Extension Offices, 1980.

GOVERNMENT PUBLICATIONS

U.S. Department of Agriculture. Soil Conservation Service. *Assistance Available from the Soil Conservation Service*. Agriculture Information Bulletin 345. Washington, D.C.: GPO, 1980.

U.S. Statutes at Large. 1935. Vol. 49, Part I, pp. 163-164.

OTHER SOURCES

Soil Conservation Society of America, *Information and Educational Conservation Tillage*. The proceedings of a national conference, March 28 - 30, 1973. Iowa, 1973, pp. 227-230.

APPENDIX A

SCS/SWCD SURVEY

The following questionnaire was compiled in order to determine the forms of communication utilized by your agency, and to examine the effectiveness of those communication forms from the perspective of agency personnel. Please answer the questions to the best of your knowledge, and avoid any temptation to collaborate with co-workers as you fill out the survey. The individual perceptions and input of each staff member is important to determining the overall communication picture of your district. The approximate completion time for this survey is 15 minutes.

Please return this questionnaire no later than 1 March 1983. A self addressed stamped envelope has been provided for your convenience. Thank you for your cooperation.

****

I. General Communication Program

1. Please check those forms of communication used by your district to convey conservation information to farmers in your district.

___ personal contact
___ bulletins/flyers
___ newsletters
___ newspapers
___ radio
___ television

___ field demonstrations
___ tours
___ clinics
___ magazines
___ public meetings
___ other (please specify) ____________

2. Please rate the following forms of communication in terms of its effectiveness in conveying conservation information to the farmers in your district (1 = not effective, 2 = somewhat effective, 3 = effective, 4 = very effective).

	Not Effective	Somewhat Effective	Effective	Very Effective
Personal contact	1	2	3	4
Bulletins/flyers	1	2	3	4
Newsletters	1	2	3	4
Newspapers	1	2	3	4
Radio	1	2	3	4
Television	1	2	3	4
Field Demonstrations	1	2	3	4

	Not Effective	Somewhat Effective	Effective	Very Effective
Tours	1	2	3	4
Clinics	1	2	3	4
Magazines	1	2	3	4
Public Meetings	1	2	3	4

3. Please rank the following forms of communication according to your personal preference for using them to convey conservation information. (1 = first choice, 11 = last choice).

___ personal contact
___ bulletins/flyers
___ newsletters
___ newspapers
___ radio
___ television
___ field demonstrations
___ tours
___ clinics
___ magazines
___ public meetings

4. Please rank the following forms of communication in order of effectiveness at conveying conservation information (1 = most effective, 11 = least effective).

___ personal contact
___ bulletins/flyers
___ newsletters
___ newspapers
___ radio
___ television
___ field demonstrations
___ tours
___ clinics
___ magazines
___ public meetings

5. For each of the following forms of communication check the range which indicates, most closely, the frequency of occurrence within your district.

a. Personal contacts per staff member per week.

___ 0 to 5
___ 5 to 10
___ 10 to 15
___ 15 and above

b. Bulletins/flyers per year.

___ 0 to 5
___ 5 to 10
___ 10 to 15
___ 15 and above

c. Average number of field demonstrations per year.

___ 0 to 2
___ 2 to 4
___ 4 to 6
___ 6 and above

d. Average number of tours per year.

___ 0 to 2
___ 2 to 4
___ 4 to 6
___ 6 and above

e. Average number of clinics per year.

___ 0 to 2
___ 2 to 4
___ 4 to 6
___ 6 and above

f. Average number of public meetings per year.

___ 0 to 2
___ 2 to 4
___ 4 to 6
___ 6 and above

II. Conservation Information Through Television

1. Does your district use television to transmit conservation information?

___ yes
___ no

2. If yes, please complete the matrix for the TV station/s which broadcast conservation information for your district.

Station Call Letters	Station Location
1.	
2.	
3.	
4.	

3. How many times per year does your district use television to convey conservation information?

___ 0 to 4

___ 4 to 8

___ 8 to 12

___ 12 or more

4. What television format does youe district use to convey conservation information?

___ "Commercial" type announcements (1 to 2 mins. in duration)

___ Short discussions on conservation issues (3 to 5 mins. in duration)

___ Regular coverage of district activities

___ Other (please specify) ______________________________

____

5. How often in the last year have district activities been covered and broadcast by TV stations?

___ 0 to 4 times

___ 4 to 8 times

___ 8 to 12 times

___ 12 or more times

6. Indicate on the following list how your district uses television time (check all that apply).

___ To promote the SCS/SWCD

___ To promote or cover public meetings

___ To promote or cover clinics

___ To promote or cover field demonstrations

___ To promote or cover tours

___ To encourage farmers to become cooperators

___ To inform farmers and the general public about conservation issues

___ To inform farmers and the general public about agricultural issues

___ To encourage farmers to adopt best management practices

___ To encourage farmers to adopt no-till farming.

___ Other (please specify) ______________________________

____

____

7. Indicate which of the following reasons for using television applies to your district (check all that apply).

___ Easily reaches a wide range of audiences

___ It is a cost-effective means by which to convey conservation information

___ Other districts use television to convey conservation information

___ Other (please specify) ______________________________

____

____

8. The amount of television time used to cover and/or promote district activities:

___ Should be more

___ Is adequate

___ Should be less

9. The amount of television time used to convey conservation information, in general:

___ Should be more

___ Is adequate

___ Should be less

III. Conservation Information Through Radio

1. Does your district use radio to convey conservation information to farmers?

___ yes

___ no

2. If yes, does your district broadcast its announcements through a local radio station?

___ yes

___ no

3. If yes, please specify the following information:

a. Station call letters ______________________

b. Station frequency:

___ AM

___ FM

c. Station location (city/town) ____________________

4. Does your district broadcast its radio announcements through radio stations other than a local station?

___ yes

___ no

5. If yes, please complete the following matrix for each additional radio station.

Station Call Letters	Frequency		Station Location
	AM	FM	
1.			
2.			
3.			
4.			
5.			

6. What format does your district use for its radio time (check all that apply)

___ Program format aired at a regular time

___ "Commercial" type announcements (1 to 2 mins. in duration) contracted to air at various times

___ Other (please specify) ____________________

____

7. District announcements are broadcasted: (check all that apply)

___ Daily

___ Weekly

___ Monthly

___ Other (please specify) ____________________

____

8. Indicate on the following list how your district uses radio time (check all that apply).

___ To promote the SCS/SWCD

___ To promote public meetings

___ To promote clinics

___ To promote field demonstrations

___ To promote tours

___ To encourage farmers to become cooperators

___ To inform farmers and the general public about conservation issues

___ To inform farmers and the genral public about agricultural issues

___ To encourage farmers to adopt best management practices
___ To encourage farmers to adopt no-till farming
___ Other (please specify) ______________________
____
____

9. Indicate which of the following reasons for using radio applies to your district (check all that apply).
___ Easily reaches a wide range of audiences
___ Is a cost-effective means by which to convey conservation information
___ Other districts use radio to convey conservation information
___ Other (please specify) ______________________
____
____

10. The amount of radio time used to cover and/or promote district activities:
___ Should be more
___ Is adequate
___ Should be less

11. The amount of radio time used to convey conservation information, in general:
___ Should be more
___ Is adequate
___ Should be less

IV. Conservation Information Through Newspapers

1. Does your district have a regular news column in a local newspaper?
___ yes
___ no

2. If yes, please specify:
a. Name of the newspaper: ______________________
b. Frequency of column:
___ Daily
___ Weekly
___ Monthly
___ Other (please specify) ______________________
____

3. The information presented in the column:

___ Relates information useful only to district cooperators
___ Relates only agricultural information
___ Relates only conservation information
___ Relates both agricultural and conservation information
___ Can be useful to most (or all) farmers
___ Promotes SCS/SWCD activities
___ Other (please specify) ________________________
____

4. Does information concerning your district appear in the newspaper outside a regular column?

___ yes
___ no

5. If yes, what percentage of these articles are the result of news releases submitted by your office?

___ 0 to 10%
___ 10 to 25%
___ 25 to 50%
___ Greater than 50%

6. When your office submits a news release, what percentage of the information is actually used by the newspaper?

___ 0 to 25%
___ 25 to 50%
___ 50 to 75%
___ 75 to 100%

7. Do you know who the farm editor is of the newspaper to which you submit news releases?

___ yes
___ no

8. If yes, do you have regular contact with the editor about district activities and/or conservation information you think farmers should be informed about?

___ yes
___ no

9. The use of newspapers to inform farmers about district activities:

___ Should be more
___ Is adequate
___ Should be less

10. The use of newspapers to convey conservation information to farmers:

___ Should be more
___ Is adequate
___ Should be less

V. Conservation Information Through Magazines

1. Does your district use magazines to convey conservation information to farmers?

___ yes
___ no

2. If yes, please indicate how often your district has used magazines to convey conservation information to farmers in the last year.

___ 0 to 4 times
___ 4 to 8 times
___ 8 to 12 times
___ More than 12 times

3. Please indicate which of the following magazines have printed articles/stories concerning your district.

___ Farm Journal
___ The Ohio Farmer
___ Soil Conservation (USDA)
___ Buckeye Farm News
___ Country Living
___ Other (please specify) ______________________________
____

4. If you indicated that your district had articles published in a magazine, what percentage of those articles were written by district personnel (as opposed to a journalist from the magazine covering and writing the story)?

___ 0 to 10%
___ 10 to 25%
___ 25 to 50%
___ Greater than 50%

5. Does your district regularly submit stories/articles for publication in magazines?

___ yes
___ no

6. Does your district maintain a list of magazines to which district articles can be submitted for publication?

___ yes

___ no

7. Does your district maintain a list of names of magazine editors to whom articles should be submitted for publication?

___ yes

___ no

8. The use of magazines to inform farmers about district activities:

___ Should be more

___ Is adequate

___ Should be less

9. The use of magazines to convey conservation information to farmers:

___ Should be more

___ Is adequate

___ Should be less

VI. Additional Comments Regarding District Conservation Information Program

The following space is for your comments on those areas of your district's conservation information program which may not have been addressed in the survey (i.e. strengths and weaknesses, areas of public information practices you would like to know more about, etc.). In addition, any other information which you think will assist the researcher in gaining a better understanding of your district's conservation information program would be appreciated.

APPENDIX B

FARMER SURVEY

I. RESPONDENT'S BACKGROUND

1. Please indicate the county in which you own or operate a farm.

___ Clinton ___ Highland ___ Warren

2. Farmer Status (please check all that apply)

___ Full-time farmer
___ Part-time farmer
___ Owner
___ Tenant
___ Farm manager
___ Other (please specify)
____
____

3. Size of farm

___ less than 100 acres
___ 100 to 250 acres
___ 250 to 500 acres
___ 500 to 1000 acres
___ 1000 acres or more

II. GENERAL COMMUNICATION/INFORMATION MEDIA

1. On the following list, please check the forms of communication through which you receive conservation information.

___ personal contact with SCS or SWCD personnel
___ SCS/SWCD bulletins/flyers
___ District newsletter
___ newspapers
___ radio
___ television
___ field demonstrations
___ tours
___ clinics/workshops
___ magazines
___ public meetings
___ equipment dealers
___ fertilizer dealers
___ neighbors
___ agency personnel other than SCS/SWCD (please specify)
____

2. Please rank the following forms of communication in terms of how well each source provides conservation information (1 = best, 15 = worst).

___ personal contact with SCS or SWCD personnel
___ SCS/SWCD bulletins/flyers
___ District newsletter
___ newspapers
___ radio
___ television
___ field demonstrations
___ tours
___ clinics/workshops
___ magazines
___ public meetings
___ equipment dealers
___ fertilizer dealers
___ neighbors
___ agency personnel other than SCS/SWCD

3. Please rank the following forms of communication in terms of how effective each source is at providing conservation information (circle the number which applies: 1 = not effective, 2 = somewhat effective, 3 = effective, 4 = very effective, or no opinion).

Personal contact with SCS or SWCD personnel	1	2	3	4	no opinion
SCS/SWCD bulletins/flyers	1	2	3	4	no opinion
District newsletter	1	2	3	4	no opinion
Newspapers	1	2	3	4	no opinion
Radio	1	2	3	4	no opinion
Television	1	2	3	4	no opinion
Field Demonstrations	1	2	3	4	no opinion
Tours	1	2	3	4	no opinion
Clinics/workshops	1	2	3	4	no opinion
Magazines	1	2	3	4	no opinion
Public Meetings	1	2	3	4	no opinion
Equipment Dealers	1	2	3	4	no opinion
Fertilizer Dealers	1	2	3	4	no opinion
Neighbors	1	2	3	4	no opinion
Agency personnel other than SCS/SWCD	1	2	3	4	no opinion

4. Please rank the following forms of communication in terms of the trust you place in the conservation information received from each source (1 = most trust, 15 = least trust).

___ personal contact with SCS or SWCD personnel
___ SCS/SWCD bulletins/flyers
___ District newsletter
___ newspapers
___ radio
___ television
___ field demonstrations
___ tours
___ clinics/workshops
___ magazines
___ public meetings
___ equipment dealers
___ fertilizer dealers
___ neighbors
___ agency personnel other than SCS/SWCD

5. Please rank the following forms of communication in terms of the trust you place in the conservation information received from each source (1 = no trust, 2 = very little trust, 3 = some trust, 4 = great deal of trust, or no opinion).

Personal contact with SCS or SWCD personnel	1	2	3	4	no opinion
SCS/SWCD bulletins/flyers	1	2	3	4	no opinion
District newsletter	1	2	3	4	no opinion
Newspapers	1	2	3	4	no opinion

Radio	1	2	3	4	no opinion
Television	1	2	3	4	no opinion
Field Demonstrations	1	2	3	4	no opinion
Tours	1	2	3	4	no opinion
Clinics/Workshops	1	2	3	4	no opinion
Magazines	1	2	3	4	no opinion
Public Meetings	1	2	3	4	no opinion
Equipment Dealers	1	2	3	4	no opinion
Fertilizer Dealers	1	2	3	4	no opinion
Neighbors	1	2	3	4	no opinion
Agency personnel other than SCS/SWCD	1	2	3	4	no opinion

6. The following SCS/SWCD activities occur annually in most counties. Please indicate which activities you attended, and whether or not you consider them sources of conservation information.

Activity	Attended		Source of Conservation Information	
	yes	no	yes	no
Annual Meeting				
District Packet				
No-till Tour				
No-till Clinic/Workshop				
County Fair Display				

7. The following is a list of activities which took place during the past year in Clinton, Highland, or Warren County, and were sponsored by the local SCS/SWCD offices. Please indicate those activities which you attended, those which you would like repeated in your county, and those which you would like to see initiated in your county (C = Clinton, H = Highland, W = Warren).

Activity (County)	Attended	Would like to see repeated	would like to see initiated
Equipment Field Day (C)			
Woodland Field Day (C)			
No-till Clinic (C)			
Watershed Tour/Conservation Practices (H)			
Arbor Day Activities (H)			
Animal Waste Management Field Day (W)			
Animal Waste Clinic (W)			
Pond Clinic (W)			
Field Test Plots (W)			

III. CONSERVATION INFORMATION THROUGH MASS MEDIA

A. Radio

1. Do you receive conservation information through radio broadcast?

___ yes

___ no

2. If yes, please list the radio station/s from which you receive conservation information. ____________________

____

3. At what time/s of the day do you hear conservation information on radio (please check all that apply)?

___ 5 - 7 AM.

___ 9 - 11 AM.

___ 11 AM. - 1 PM.

___ 1 - 3 PM.

___ 3 - 5 PM.

___ 5 - 7 PM.

___ 7 - 9 PM.

___ 9 - 11 PM.

___ Other (please specify) ________

____

4. The amount of radio time devoted to conservation information:

___ should be more

___ is adequate

___ should be less

B. Television

1. Do you receive conservation information through television?

___ yes

___ no

2. If yes, please list the TV station/s from which you receive conservation information. ____________________

____

3. At what time/s of the day do you receive conservation information through television (please check all the times which apply)?

___ 5 - 7 AM.

___ 9 - 11 AM.

___ 11 AM. - 1 PM.

___ 1 - 3 PM.

___ 3 - 5 PM.

___ 5 - 7 PM.

___ 7 - 9 PM.

___ 9 - 11 PM.

___ Other (please specify) ________

____

4. The amount of television time devoted to conservation information:

___ should be more

___ is adequate

___ should be less

C. Newspapers

1. Do you receive conservation information through newspapers?

    ___ yes

    ___ no

2. If yes, please list the newspapers from which you receive conservation information. ____________________
____

3. The majority of conservation information you receive from newspapers is in:

    ___ the district conservation column

    ___ articles/stories about district activities

    ___ other (please specify) ____________________
    ____
    ____

4. The amount of conservation information available from newspapers:

    ___ should be more

    ___ is adequate

    ___ should be less

D. Magazines

1. Do you receive conservation information through magazines?

    ___ yes

    ___ no

2. If yes, please list the magazines from which you receive conservation information. ____________________
____
____

3. If not listed above, please list those farm and/or conservation magazines which you receive regularly. __________
____
____

4. The amount of conservation information available from magazines:

    ___ should be more

    ___ is adequate

    ___ should be less

IV. CONTACT WITH SCS/SWCD PERSONNEL

1. How often do you make contact with SCS/SWCD personnel?

___ never
___ every 3 to 4 months
___ every 6 to 8 months
___ once each year
___ every 2 to 3 years
___ other (please specify) ________
____

2. Are you a district cooperator?

___ yes
___ no

3. If you are not a district cooperator, or have not had contact with the SCS and/or the SWCD, would you like to be contacted by your county's SCS/SWCD office?

___ yes
___ no

4. If yes, please indicate how you would like to be contacted.

___ phone call
___ visit by SWCD technician

Name: ________________
Address: ________________
____
Phone: ________________

Reason for contact (ex. no-till management, conservation plan, learn more about district programs, etc.) ________________
____
____

Names and addresses listed here will be sent to the appropriate SCS/SWCD office, separate from survey results. Names will not be mentioned in study recommendations or in the thesis.

V. CONSERVATION TOPICS FOR FUTURE PROGRAMS

In the following space (including the back of this page), please list those areas of interest which you would like to see as part of future SCS/SWCD communication/information programs.